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GOD IN EVOLUTION

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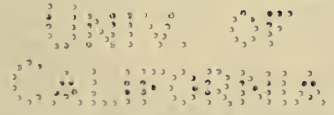
A PRAGMATIC STUDY OF THEOLOGY

BY

FRANCIS HOWE JOHNSON

AUTHOR OF "WHAT IS REALITY?"

Amid all that is problematic this at least is certain:—Our life is no empty surface-dallying. Something momentously significant is going forward in it, a movement with which we ourselves have much to do, the direction of which we are quite well able to gauge.—RUDOLF EUCKEN



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PREFACE

THE argument to which attention is called in the following pages is intimately related to that of a book written some twenty years ago, entitled "What is Reality?"[1] parts of two chapters of which are brought together and re-stated in Appendix A of this book.

On some accounts the interval that separates the two is infelicitous. But, on the other hand, it is an advantage; for a fundamental principle of the method herein advocated is, that *the value of any theory can be demonstrated only by the test of experience.* And, at the end of two decades of scientific and philosophical activity, it is encouraging to find that the stream of thought on which the earlier venture was launched has swollen into a great river, carrying philosophies of high import.

The answer then given to the question — "What is Reality?" has found substantial endorsement in the pragmatic method of James and Schiller and Dewey, and in the trend of a wide-spread movement of scattered thought

[1] Houghton, Mifflin and Co., 1891, Boston and New York, pp. xxvii + 510.

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that is thoroughly, though often unconsciously, pragmatistic.

In other words, the foundations, laid twenty years ago, having solidified rather than crumbled, a strong inducement is offered to attempt a more specific application of this method to theology. And, if a renewed appeal to the actualities of experience shall be found to yield some intelligible answers in this department, it will surely not be a matter of "carrying coals to Newcastle."

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GOD IN EVOLUTION

CHAPTER I

THE SITUATION

THEOLOGY has been, and must continue to be, implicated in the movements that take place in the cognate departments of science and philosophy. The three interpenetrate each other, and a living theology is at all times sensitive to changes of attitude in the other two. Not that it is derived from either, or both of them, or that it is, at any time, vitally dependent upon them. It grows out of and is rooted in the real experiences of men in their spiritual relations. It will continue to live and energize in the world even though science and philosophy should be arrayed against it.

But it is needless to say that under such circumstances it would be at a disadvantage. It would not exert its legitimate influence. The situation would be abnormal. The three should march together, be mutually supporting, restraining, inspiring. And if I am not mistaken, it is toward such a condition of things that the ever-turning wheels of evolution are carrying us.

Through our antagonisms, and even by means of them, we are fighting our way to a better understanding. Each department, by loyalty to its own aspect of the truth, has helped to work out the one great problem. Even controversy, which at times seems so barren, has helped to eliminate useless issues and clarify the medium of thought in which we move.

The present outlook is, from some points of view at least, most interesting and full of promise; for in each of the three departments there is a germinal movement, a new departure and, also discernible, a common centre toward which all three converge.

The situation is, in important respects, like that of the early Christian centuries, when old conservative religions of separate nations budded forth, each one with a new version of itself; and old philosophies enlarged and adapted themselves in obedience to new aspects of truth that had dawned upon the consciousness of the race. The ancient Persian faith gave birth to Mithraism; that of Egypt to the cult of Isis, and the grand old Hebrew religion, to Christianity; and, in all three, the new elements had much in common. So also with the old philosophies, the new versions moved toward one vaguely-defined goal, and also tended to assimilation with the new religions.

To-day, in science, in philosophy and in religion there are similar vigorous outgrowths, embodying a new way of looking at things. In science

it is the gradual decay of the mechanical conception of the world, and the substitution for it of a psychological interpretation of its phenomena. In philosophy it is the protest on the part of a considerable body of concrete thinkers, who employ in their constructions a method that deals, to use Professor John Dewey's phrase, with *whole*, not half, ideas. Breaking with the abstractions and negations of the past, this school puts itself in communication with actual experience.

In religion, that is, in the statement of it which we call theology, there is a movement, not concerted, not clearly formulated, but with well-defined convergent tendencies. As in the elder day, so now, there is a common motive underlying views that, to some extent, are divergent. Then, the movement was away from polytheism and toward some form of monotheism; now, it is away from the thought of God as external to the universe, and toward some conception of Him as its living, in-dwelling principle.

Perhaps I am over-sanguine in my forecast of the outcome of these new departures in science, philosophy and theology, but it seems to me written in the very nature of the great process itself that it must be some harmonizing synthesis.

The little world of the *Ego*, in which each one of us lives, has been built up gradually by adding concept to concept, and by the successive correlation of these additions, in progressively larger

syntheses. In the course of growth, some of these additions have easily and naturally fitted in to what was previously organized; but, on the other hand, many of them have had to pass through much tribulation before they could be received. The highly-organized personality that every normally balanced adult has come to be, contains many elements that, originally heterogeneous and unassimilable, have come to be correlated parts of a conscious personality.

The same is true of the vastly complicated social organism; and in its history we can trace the gradual amalgamation of families and tribes and nations, through long-drawn-out antagonisms, into larger and still larger organizations. And, in every case, these transformations have been brought about only in part and *formally* by the coercive power of external events, and essentially and intensively by internal growth changes, — expansions of thought and purpose, and wider outlooks. Except for these there would have been no real assimilation, no efficient unity.*

Over and over again this process has been repeated on life's stage; and we may as well doubt the continued revolution of the earth through space, as to doubt the continuance of the onward movement toward this enlargement and correlation of thought. We may not indeed

*A most valuable exposition of this process of mental organization is given in "Mind in Evolution" by L. T. Hobhouse, M.A., Chapter XIII.

dream of a total cessation of antagonism. When one set of contrarieties has been adjusted, another set, on a wider field, emerges. Were it not so, mental evolution would be arrested.

But, for the immediate outlook, I think we may say that science, philosophy and theology, that have for a long time been passing through the phase of separation, and sometimes of antagonism, are now, in the light of wider concepts, drawing together. The lines of demarcation are fading out, the larger view is at hand. Our science becomes philosophical and our philosophy becomes scientific; and both lead up to, and imply, theology. Some of the best intellects are working synthetically; not confining themselves exclusively to the one aspect of truth represented in a department, but reaching out to find the truest expression of the reality underlying all.

This movement has given us such men as the late William James, and the French philosopher, Henri Bergson. In each separate department, also, it has brought forth those who, without venturing beyond their own chosen line of work, have, within that sphere, so reconstructed its speculative outlooks as to strengthen the thought that is being worked out elsewhere: — such men as the embryologist, Hans Driesch, who, beginning his career with the acceptance of the purely mechanical view of organic development, was carried by his studies to the necessity of assuming an undefined influence, guiding the mechanical

forces toward the realization of ends. Such men also as Reinke, and the physiologist Bunge, who advocates seeking a knowledge of the creative impulse by using what we know of causation in the internal world of our own consciousness, for the interpretation of that which transpires in the external world of material organization.

We must not allow the significance of this movement to be obscured by the names that are given to its different developments with the word *neo* prefixed. The labels "neo-Lamarckism" or "neo-vitalism" may serve a useful purpose as indicating a certain relatedness between the present and the past of speculative thought; but when these are used to *identify* in any measure the old form with the new, when the new is called a "recurrence to mediæval mysticism," or a "pseudo-metaphysical theory of life," they are misleading. Such a treatment of recurrent phases of thought is not in the interest of light-bearing but of obscuration.

We recognize, as those of an elder day often did not, that human thought ascends as a spiral, and that each new turn introduces hypotheses that, more or less, resemble phases of speculation abandoned on a lower plane. They are, *in some respects*, the same, but essentially different in that, through the removal of limitations in some directions and the positive enlargement of thought in others, they are so modified and reset as to be completely transformed. The psychological ex-

planations of evolution that are today labelled *neo-Lamarckism* are no more than a reminder of the hypothesis of the eminent naturalist of a century and a half ago; and the comparison of the vitalism of to-day with that of Aristotle borders on the grotesque.

In the department of theology, while there is a strong and sustained unanimity of dissent from certain phases of inherited belief, and while there are, as we have said, marked convergent tendencies in the transformation of thought, and much enthusiasm also on the part of individuals and groups of individuals for newly-apprehended aspects of the truth, there is, as yet, no pronounced principle of solidarity binding the positive aspects of the work together, nothing of that commanding power that emanates from the assent of a multitude, or even of a select few whom men have learned to trust. At the same time, there exists a profound and growing conviction that such a solidarity, such a preponderating weight of agreement, is not only possible but, that it ought to be realized. There is no department of life in which certitude is more ardently, or reasonably, longed for. But, the very growth process that stimulates religious thinking seems to be the natural and unavoidable enemy of certitude.

How then is confidence to be restored without going back to the policy of a fixed immovable theology? Can anything be substituted for the

divine authority of the church? Within the Roman church, the Modernist movement accentuates this issue, though the problem to be solved is not essentially different from that of Protestantism.

The difference in the two situations is that the latter, having lived through three centuries of denominational antagonism, is, in some sort, inured to its disabilities, — has, so to speak, adjusted itself to a *modus vivendi*, though deeply conscious of its unsatisfactoriness: while Modernism, viewing this same experience from without, sees in its outcome an object-lesson, a terrible warning. Hence a dilemma; the substance of which is stated by Father Tyrrell in the following words: — "Taught by history, God's great logic-mill, which has worked out both these sixteenth century solutions, the solution of unfettered authority and the solution of unfettered liberty to their impossible results, he (the modernist), will see the necessity of going back to the point of divergence." *

The modernist, in other words, is in search of some *new* way, that shall work experimentally, and, at the same time, yield the advantages of authority and liberty.

The possibility that naturally suggests itself is that of combination, — the adoption of a method that shall associate the two desirable

* "Passing Protestantism and coming Catholicism," by Newman Smyth, p. 182.

elements in such manner that neither shall override the other, but that each shall exercise a restraining and supporting power. Such a method ought to be found, because all the movements of the world are organized on a similar plan. The great upward creative process which we call evolution is the outcome of antagonistic forces that act and react upon each other after just such a fashion.

But the achievement of such a method is not so simple a matter as it might at first seem, not so simple as it actually did seem in the early days of the great secession from Rome. For while Protestantism leads logically to what Father Tyrrill calls unfettered liberty, it has, as matter of fact, been striving all through the years to reach just such a combination as that contemplated. And the great question of to-day is, can we go any farther in this direction? Does the experience of the past encourage the hope, long deferred, that this desideratum will be supplied? Is there, at the present day, any emergence of new elements that may render practicable a combination that has not been a success hitherto, and that is working more and more limpingly as time goes on?

The impression prevails in some quarters that the Modernist movement may somehow bring to Protestantism a kind of authority, tempered by liberty, which will prove the very thing which it long has sought, and that the Christian church

as a whole may thus realize a stable, and, at the same time, a living and growing unity.

To many others, however, this hope seems to lack foundation, because the kind of authority thus provided differs in no respect from that to which so long a trial has been given: and a radically different way of surmounting the difficulty is proposed: — the substitution, that is, of another kind of authority. The gist of their argument may, I think, be stated somewhat as follows. The effort to combine ecclesiastical authority and liberty has failed to work, because it is an attempt to unite in action two motives that are not of the same order, two mutually irreconcilable elements. Liberty of thought is a living, growing, aggressive principle. Divinely appointed, ecclesiastical authority is a static, immovable, inelastic principle; one that does not simply restrain liberty, but abolishes it. It is yoking together the dead and the living. One, or the other, of these must, in the long run, triumph and reign supreme. But, what alternative is there?

In the April, 1911, number of the "Hibbert Journal" there is an appeal from the side of science to theology entitled, "Can Theology become Scientific?" * in which the following questions are put to theologians: — "Are they willing to regard religious facts as the primal realities wherewith they are concerned, and theological

*By M. M. Pattison Muir, M.A.

theories as instruments for acquiring rationalized knowledge of these facts, not as answers to enigmas in which they can rest? Are they willing to measure the truthfulness of theological ideas by their values as aids to religious life, and by their relations to other truths which also must be preserved by men? Theologians speak of theology as a science: are they willing to advance their science by using the scientific method?"

After outlining what is meant by the scientific method, the same article makes the following hypothetical forecast.

"Let us suppose, for a moment, that theology were to adopt and use this method. Theology would then be a systematic attempt to co-ordinate the facts of man's religious life; to express the points of agreement between groups of these facts by *means* of general formulas, in other words to find the laws of religious experiences; to try the hypotheses which have been made, for the purpose of bringing order into sections of religious facts, by inquiring how these hypotheses have worked; to test the truth of the theories which have claimed, and of those which now claim, to explain the facts of religious experience, by inquiring into their fruitfulness, their vivifying influence, their power of bringing the realities with which they are concerned into reconciling contact with other truths of which human intelligence demands the preservation."

The method here suggested is the outcome of

a principle of far wider scope than the realm of physical science. It is called *scientific*, simply because it has been conspicuously used in the practical part of scientific procedure. PRAGMATIC is the word that, in its very modern signification, stands for the larger transforming principle that is bringing the antagonistic aspects of our thought together. I have used the word *pragmatic* and said nothing of pragmatism, because it seems to me that the two words may be used for effecting a very necessary discrimination.

If the former is used solely to designate *method*, and the latter solely a *system of philosophy*, that has sprung up as one application of that method, much confusion may be avoided. The *method*, which has endless applications, is easily understood, and is illustrated so abundantly and clearly in life that he who runs may read. As Prof. William James has said: "There is absolutely nothing new in the pragmatic method," but "not until our own time has it generalized itself, become conscious of a universal mission, pretended to a conquering destiny."

Between this method and the derived system of philosophy the same writer draws a sharp line of demarcation. As a *method*, it stands for no special results, it is rather an attitude of orientation. As a *system of philosophy*, on the other hand, it is applied to the working out of a "*theory of truth.*" This latter, however ably it may be conducted and however useful it may, in

the long run, prove to be, is an entirely different matter: and the failure to note this difference has given rise to many damaging misconceptions and much unwarrantable prejudice against the *method.* For, in the development of such a philosophy and in its controversial defence, many words and expressions are used that have a purely technical significance, and statements are sometimes made that, taken out of their controversial setting, give the impression of opposing the very truths they are advocating.

It is with the method alone that we are concerned; and we shall hope to make the nature of its working understood, not by definitions, but by illustrations: for a method that deals with concrete ideas can be best explained concretely, that is, by the exhibition of its actual working. It will, however, be worth while to carry along with us and keep continually in sight Professor Schiller's Protagorean formula — "MAN IS THE MEASURE* OF ALL THINGS." It may also be helpful to outline some of the probable results of its adoption.

In the first place, it would necessarily banish to the limbo of disused instrumentalities the kind of authority that has for centuries held sway: — the authority, that is, that takes its stand on a unique, divine revelation granted to a specially appointed group of men, who act as its guardians and interpreters. In the second

*The analogical and intensive measure.

place, it would set up another kind of authority in the place of that which it deposed: — the authority of human experience. Far from delivering theology over to unfettered liberty it would simply transfer all its problems to another tribunal, — to the tribunal that adjudicates all questions that arise in every department of science. In it we have a kind of authority that can work with liberty, because it is a living, growing and adjustable principle, because it takes account of all the new elements that find a place in our ever-widening experience; in short, because it is of the same elastic nature as the liberty with which it has to co-operate.

It is no less strong for resistance because of its expansiveness. It gives, but it does not give way. It yields and reconstructs, but it does not break and disappear. In the long run it is a far more sure reliance, and, in its progress, irresistible.

Third, as related to other departments of constructive thought the change would be a very radical one. It would put an end to the remote separateness of theology, to its superior-cast pretentions, and bring it into accord with the community of interests that jointly affect the welfare of man. It would bring it completely under the influence of the method that has transformed and is still transforming the outlooks of theoretical science; — a transformation that makes it possible for theology and science to

perfectly assimilate their working principles without the surrender of anything that is vital.

It is into a very real and comprehensive world that this pragmatic method carries us. It calls our attention, not to some special phases of reality alone, but to every aspect of it. Its theology will therefore be one that roots itself in and grows strong on every department of human thought and activity, that draws inspiration from every kind of emotion, that turns its back on nothing, despises nothing. It must be a theology that studies reverently the deep things of God, not alone in the utterances of seers through whom He has unmistakably spoken, not alone in the contributions of science, but also in the common wisdom that has been wrought out and compacted in the upward travail of the race. As Maeterlinck has said: — "The thinker continues to think *justly*, only when he does not lose contact with those who do not think."

Again, in such a theology, the great creative process of the world will be studied as a sacred revelation of its Author. Humanity, in learning through evolution *how* it has come to be *what it is*, has entered upon a new phase of self-knowledge, and upon new outlooks of what lies before it. But it is not alone, or most vitally as a matter of *knowledge*, that this affects us: for knowledge, standing by itself, is little more than material, or instrumentality to be used. It is pre-eminently

in the *power* that knowledge generates that the hope of the future lies.

Bergson's conception of the whole great movement of creation as a struggle upward on the part of the creature, an overcoming, a triumphing over difficulties, in which every individual has an honourable place, an *opportunity* of contributing to the great advancing organization something new and precious, is a creative impulse in itself. And James' proclamation of "THE WILL TO BELIEVE" translates itself into the will and the power to dare and to conquer.

There is no lack of inspiration in this new movement. Like an older evangel, it proclaims, — "The kingdom of God is within you." The power that works and overcomes through the whole realm of nature, it seems to say, works in you and with you. Eucken touches a profound and most important principle of life when he says: — "Spiritual truth cannot attract us unless it come before us as *our own* and not as something alien to us. In order to make effective appeal it must have its roots in our own nature, and subserve the development of this nature."*

We are made very familiar in these days with the word *collapse*. On this side and on that, we are told that it is taking place among the old structures that we have inherited and also among the new that have been hastily run up as substitutes; so that we seem, at times, to be living

* "The Meaning and Value of Life," p. 88.

in an atmosphere of demolition, breathing lime-dust, and bewildered with the crash of falling walls. But, it is possible for most of us to get out of this, leaving it to the wreckers whose business it is, while we escape to the open places of thought where live things are growing.

But this is anticipating. Our present business is to test the theological value of the pragmatic method, not to praise it. A change from the old method is not to be lightly undertaken: for it is not a surface adjustment that we are considering. It goes indeed to the very roots of things, and our investigation of it must be on the lines of experience. What does the past testify as to the working in theology and religion of the established method? and what measure of success, on the other hand, has attended the working of the pragmatic method in the departments of human activity to which it has been applied?

CHAPTER II

CONCERNING METHOD

TO say that Protestantism is to-day labouring on through a stress of great complications without a method, might, in view of all the evidences of continuity and growth that we see about us, seem captious. But if one were to try to define what that method is, the above statement might not seem so very far amiss.

I

As matter of fact, Protestantism has, from the outset of its career, tried to solve the problems of religion by the use of a mixed method in which two most divergent principles offset each other. The Church of Rome had, and still has, a well-defined method to which it adheres with great rigidity. It hinges upon the assumption of special and absolute divine sanction. Its claim is that the knowledge of God and of His relations to men is a matter confided to a chosen few, who are divinely commissioned to communicate and administer it to the mass of mankind with absolute authority. This is an easily understood method, strong in its simplicity and its finality.

It is a method calculated to keep men united and to hold them with a grip of iron during periods of intellectual stagnation.

But Protestantism was the child of a great intellectual awakening. Liberty of thought, under the guidance of the Scriptures of the Old and New Testaments, was its underlying motive. The privilege of the individual to approach God on his own account and to adjust the matters of his soul with Him at first hand was the very breath of its existence. Clearly, here was a great gain to the individual, a great stimulus to his spiritual and intellectual vitality. But what was to become of corporate religion? Was there to be no church? no consensus of faith, no unity of doctrine, no authority to withstand the vagaries of the individual? The sacred writings, even if held to be verbally inspired by God, could not hold men together unless some authoritative interpretation of them were formulated to be accepted by all. So, over against liberty of thought and freedom of access to God, the system of doctrine that had grown up under the old church was retained, with the stamp of divine authority attached to it, as heretofore, though somewhat more loosely.

But at the same time the principle of liberty of thought, striking its root deep, grew apace and brought forth dissension and sectarianism. Both methods were retained; not alone because men were habituated to them, but because each met, in its way, an ineradicable want of

their nature; and they adjusted themselves now to the one and now to the other, as circumstances dictated. The two principles were the contradiction of each other; but having been once developed and wrought into life, neither could be dropped. Corporate religion insisted on the retention of the old method. Personal, growing religion found the new indispensable. Wherever men thought and studied and confronted the newer aspects of the world, the old method was summarily set aside. When the guardians of the church thought they saw it about to be torn asunder by the influx of new and unassimilable material, they fell back on the authority of the past, hoping to stay the tide of change.

Under this dual regime religion has lived. It has to some extent held men together, and within the church much growth has been tolerated and indirectly encouraged, but not, for the most part, officially endorsed. But the weakness engendered by the continuance of this state of things is most evident. Each of the two principles, it is true, has met a religious want and, separately, they have been serviceable; but their reactions upon each other have worked much mischief. The schisms created by liberty have been intensified and fixed by the principle of final authority; for each new form of faith carried with it something of the claim to divine sanction. It is unnecessary to enlarge upon this; for wherever the representatives of Protestant communions

meet in conclave, the divisions in the church are deplored, the wickedness of them is confessed, and measures for overcoming them are discussed. But the difficulties in the way continue to seem insuperable. And so long as the old method continues to be recognized, they are insuperable.

If the particular tenets which divide the different communions are each and every one held to be parts of an order definitely established by God, essential constituents of "the faith once delivered to the saints," the modification of them would be impious. That which bears the stamp of a divine command cannot be surrendered. Each one is willing and desirous that all the others should confess the error of their ways and become reconciled to the one and only true faith, which is its own. But each of the others can make but one reply, "*Non possumus.*"

If the divisions in the Protestant Church are ever to become merged in a common and united faith, it must be through the mediation of a method differing radically from institutionalism, on the one hand, and individualism on the other; but at the same time, it must be one that shall meet in a legitimate way the two above-mentioned necessities of the religious life. It must yield a corporate faith that can be always referred to as the support and the rectifier of that of the individual, but which is also open to modification and growth. It is the belief of the writer that the pragmatic method called in the history of

science the *inductive* method, can be so applied to theology as to meet both these requirements.

II

The first thing we have to say about this method is that it is, in no sense, new. It is not a doctrinaire method; it is not an impracticable dream; it is not revolutionary; it is a method that has long been in satisfactory use, has been thoroughly tested in a great department of constructive thought, has yielded results that men could live by and around which they could rally in a united support. It is called the inductive method, not because it is opposed to, or exclusive of, the deductive, but because it abstains from making deductions until, by the collocation and classification of facts, it has a deposit of reality from which to deduce. Thus the word *inductive* was used to distinguish it from that method which assumed the grounds from which deductions were to be made by a sort of right of eminent domain, employing abstractions, the fragmentary products of analytic thought, as if they were the fundamental and indubitable realities of the world.

We may say then that the inductive method is the progressive building up of truth by inference from, and verification through, the actualities of experience. Its advocates claim no miraculous revelation, they take their stand on no a priori assumptions. They make the facts of experience their study, and they appeal to facts for the en-

dorsement of their conclusions. Their attitude toward all nature, physical and psychical, is one of docility; their attitude toward men is that of persuasion. To the employment of this method modern science owes all its achievements, and only by its constant use, from the first dawnings of human intelligence, has our great body of common-sense wisdom come to be what it is.

Our reasons for believing that the faithful employment of this method will yield results as satisfactory in the realm of religion as in that of physical science are, first, that it has in the past produced such results. I am not now thinking of the cultivation of that branch of our inherited theology which is called "natural" and which, under most systems of formal theology, has had a place assigned it. It has not figured as an important factor, it has been as a humble servant in the house, capable of throwing light on some of the details of its management, but not to be trusted in its deeper counsels. It could hardly be otherwise, while the assumptions of orthodoxy and the facts of the natural world remained hopelessly estranged from each other.

The satisfactory results to which I refer are those which to-day constitute the body of our reliable assets in religious matters. For the fact that the vital elements of our religion have come down to us through the ages without loss we have to thank this very principle of endorsement and conservation by experimental tests. The conven-

tions and institutions of men have buried them deep, at times, in extraneous matter, have dressed them up in fantastic clothes, so that they were temporarily hidden or transformed, but they have been powerless to change them essentially; the gold has not rusted, the precious stones have not had their fire quenched. These imperishable elemental truths were first recognized as such by the instinctive response of spirit to spirit, and they were transmitted from one generation to another by the same responses. Human experience from age to age endorsed them and approved them as eternal verities, radically distinguished from all mere temporary adjustments to passing conditions.

But this illustrates only one side of our method's working — the conservative. On the other hand its progressive, transforming power has been most strikingly illustrated during the last half-century in the production of what we may call a humanized theology. Its distinguishing characteristics have been, first, an increased respect for the actualities of religious and moral development, and, second, the courage to reconstruct theology in reliance upon them. The ground assumed, if not explicitly stated, is that the realities of a continually widening experience constitute an additional revelation not inferior in value, or authority, to the revelations of past ages; and further, that where the later revelation conflicts with the earlier, it must be given the right of way. The adoption of this new standpoint and method has enabled us to

look through and beyond dogmas that, in the past, bounded our vision. It has constrained us to see the truths that some of these embodied in such different settings and relations that, except for labels, we should never recognize them.

To those not in sympathy with this movement, who pass judgment upon it from the outside, it may well seem as if the end of all things theological were at hand. Diverse and endless changes, some of them of the deepest significance, have followed one upon another. Some of these have been amplifications, some have been attenuations. In a critical age the one class as well as the other increases the feeling of instability. But, on the other hand, those who are *of* the new order and understand it are hopefully cognizant of a process of reintegration, a new and vigorous growth, that will make both religion and religious doctrine far more potent factors in the lives of men than they have hitherto been.

III

That this hopeful view is not ill-founded is the confident belief of the writer, but it seems equally clear that its realization is conditioned upon the unequivocal acceptance of the method by the use of which it has been generated. As matters stand, there is an ambiguity attaching to the derivation of our larger constructions which affects not only those who judge from the outside, but also, most prejudicially, the constructive work

itself. However well thought out our new creed may be, so long as the old claims of authority are, in any measure, recognized, we hold it weakly. We may reach new statements of doctrine that altogether commend themselves to our expanding knowledge and to our modern ways of thinking and feeling, but the question always arises, On what do these rest? Is the fact of their agreeableness to us, or to those in like circumstances, a trustworthy evidence of their validity? Or, must we regard them simply as makeshifts, adjusted to our special wants? This, it seems to me, is a consideration that demands our serious attention, both for the strengthening of ourselves in the courage of our convictions, and also for inspiring those who are looking on from the outside with respect for them.

While we have been working toward the formulation of these larger views, we have lived in the conviction that there was some underlying justification for the course we were taking. The first steps may have been fraught with anxiety, but, as we have gone on, our courage has been re-enforced. We have felt assured that there was firm ground under us. The time has come for us to define clearly what the nature of this ground is, and cutting ourselves loose from other reliance, to take our stand squarely on it. To this we are not only invited, but, in the interests of survival, coerced. Theology cannot exist among the forces that influence the world, otherwise.

I have ventured to say that *the time has come*, not in view of the general principle that "there is *no* time like the present," but because there never has been a time like the present. The onward movement of thought that has constrained us to remodel our theology has been gradually transforming some of our most deep-seated conceptions, thereby making feasible necessary changes in our mental adjustments that in other days were impossible. Professor Kirksopp Lake has recently called attention to the fact that human nature will often listen to a reformer who wishes to change either the appearance or the substance of belief, but not to one who attacks both simultaneously: "One generation alters the substance, but leaves the appearance; the next sees the inconsistency, and changes the appearance as well. It takes two generations to complete the process, and that is reform; if the attempt is made to do both at once, it becomes revolution." *

The substance of our theology has been changing through many generations, but most rapidly during the last half-century. The method also has been changing, but much less rapidly. The inconsistency between the two becomes every day more obvious and more embarrassing. The times are ripe for the definite adjustment of the latter to the former. It is but the consummation of a process that is already far advanced. We

* "Harvard Theological Review," January, 1911, "The Shepherd of Hermas."

have been gradually weaning our religious beliefs from dependence upon miracle and extra-natural authority. Whatever view we might take of the asserted impossibility of extraordinary events in a world governed by law, we have felt that there existed a better foundation or derivation for spiritual beliefs, than that afforded by historical events of the miraculous order. We have therefore quietly transferred our valuables. We have found attachments for them in nature, in the human nature that we believe to be an emanation from the Divine.

But we do not quite give up the old dependence. Mount Sinai, the miraculous birth of Christ, the endorsement by the Holy Ghost at the time of His baptism, His Resurrection and Ascension, the Pentecostal outpouring of the Holy Spirit and so many of the other recorded miracles as seem necessary for the conservation of the faith we still enshrine and guard as sacred. There are, we say, certain ultimate facts of our religion which cannot be deduced from the elements of human experience, that are quite outside its sphere and apparently antagonistic to it. Such is the doctrine of the continuity of human life beyond the grave, and such also that of the new birth. It is the belief of the writer that this view of the necessity of extra support is not only false, but pernicious; that these doctrines, in the light of our increased knowledge, are in no need

of miraculous endorsement, that they can stand alone and develop a far greater strength without such endorsement. The reasons for this belief will be given in some of the succeeding chapters.

IV

One of the great obstacles in the way of the definite abandonment of the old and the adoption of the newer method has been the survival of a crude, primitive conception of what constitutes stability. In the light of our larger knowledge there has been a complete reorganization of this conception. Our whole thought of the world has been changing from the static to the kinetic. Immobility is no longer a synonym for stability. We learned, a few centuries ago, that the planet on which we live, instead of being, as we had hitherto believed, a fixture in space, was travelling through it with incredible velocity. And, from that time on, one revelation of science after another has brought home to us the fact that what we call stability, — that which, as related to us, *is* stability, is nothing other than an equilibrium of forces.

To bring the different departments of life and thought into harmony with this, has been slow work. But, however long it may take, all our thought must, soon or late, come to it. And each department, when the adjustment is made, experiences a new birth. Theology must emerge from it with a quickened life and a more stable

faith. But the stability will not be of the kind that our ancestors desired. We think in tropes and analogies. The stability of the past found its analogue in foundations; the rocks and the everlasting hills were used as the expression of it. Unchangeableness was its essential characteristic. To-day our type of stability is an organization of harmonized forces that mutually support and modify each other. Our future system of doctrines will not be a skilfully constructed mosaic, for ever repeating the same message in terms of stone, but rather a living landscape, which changes from day to day, as the spring advances, yet without losing its essential characteristics.

Our corporate faith will be a living organism exercising vital functions. It will be nourished continually by new material, some of which it will assimilate and some of which it will discard. Being alive, it will have the power of eliminating worn-out, or alien, material that would otherwise poison the system. Our inability to do this, while harbouring the old superstition of finality and inviolability, is manifest; and equally manifest is the ease with which this function of elimination and rectification works in the scientific method.

A large part of our organized science is practically established. We do not anticipate any essential changes in it. It is sufficiently fixed to live by and to work by. But in addition to this it has extensive outlying attachments that

are in all stages of uncertainty. It entertains innumerable hypotheses that eventually come to nothing. It now and then ventures upon great generalizations that, discredited by a wider induction, have to be withdrawn. It makes no end of mistakes, and it is not afraid of making them, because they are not vital, they can be easily rectified. It owes all its progress to freedom of speculation and experiment. Its cherished results are the survivors of a searching ordeal. Its motto is "Prove all things, hold fast that which is good."

This, I conceive, is what our reorganized theology should be. And when it shall have reached this stage of development, it will find magnificent opportunities open to it. The same onward movement that has brought it blindfold, by a way that it knew not, will lead it open-eyed into a realm of boundless extent and endless activity. The way is clear for us to go in and possess this promised land; gates have been opened wide where we have, till now, imagined only a dead wall. The nature that we study to-day is another world from that which confronted our ancestors even a generation ago. Theirs was a nature out of focus, — a nature so misconceived that every speculative truth gathered from it was to some extent an untruth. The inferences from it were not all error: they embodied some great elemental truths, but these were out of relation to each other. Nature told no clear, coherent story. Its testi-

mony in one direction seemed to invalidate that which it gave in another. So far as practical relations were concerned, men learned, experimentally, to adjust themselves to it; but when they tried to use the knowledge so acquired for excursions into the unknown, they were baffled by contradictions.

To overcome these they invented expedients which, though serviceable in some relations, obstructed the way to the larger view. Thus, nature was separated into two departments, or spheres, of influence; the one embracing its uniformities, the other its exceptional events. The former were calculable and conceived of through the analogy of mechanism; the latter, assumed to be incalculable, were conceived through the analogy of mind. The former represented the idea of permanence and unchangeable order, the latter the idea of interference and new departures. The conception of continuous movement and gradual change had no part in this thought of the universe. The phenomena of growth and of individual development were, it is true, always in evidence, but they were regarded as a mere play on the surface, — petty cycles of change that left all things as they were. Its conception of important change was that of a more or less violent break with an established past, followed by a permanently fixed new order.

To a theology dominated by ruling ideas of this kind the discoveries of science were necessarily

destructive. They subjected it to repeated earthquake shocks, without offering any assistance in the way of reconstruction. In the conflict which ensued, science, young, active, progressive, had every advantage against a theology sheltered behind fortifications and unprogressive. The whole territory on which it depended for support was invaded and ravaged by the enemy. The realm of the supernatural was day by day transformed and added to the realm of the natural. Every attempt at reprisal was abortive. The established theology, that had for ages ruled the world, was more and more hemmed in, depleted, and shorn of its prestige.

But in the onward march of the great process it is the unexpected that happens. Speculative science, so orderly, so sure of itself and of its future, conceived and brought forth a monstrosity. Hitherto all its great principles could be expressed in terms of mechanism and mathematics; but now, from the department of biology, there came a generalization far greater, more comprehensive, more dominating than any that had gone before it.

Evolution, though the legitimate offspring of science, was not in harmony with it. Not only did it stand aloof from its formulated principles, but it seemed to carry implications that invalidated the most fundamental of them. Until now science had met no check for the simple reason that it had occupied itself with one aspect of

nature, that of its instrumentalities. But this new generalization, while forcing it to extend its domains, at the same time laid upon it the necessity of adjusting itself to new conditions. Until now science would have nothing to do with the question of origins. It contemptuously surrendered this to theology and made light of its fanciful constructions. But this great modern, overarching principle, of which it was so justly proud, made the consideration of origins a necessity. And the "Origin of Species" was its first message to the world at large.

The conservators of theology were so taken up with the revolutionizing effects of the new doctrine upon its own special interests as to be quite unobservant of its disorganizing reactions in the camp of science. And even now, half a century from its inception, this aspect of the situation is not half recognized. Let us look at it for a moment, for it will help us to understand the relation which this world-transforming principle sustains to theology on the one hand and to science on the other.

It is not difficult to perceive that the new light that broke upon the scientific world with evolution shook the conception of the uniformity of nature as severely as this latter had shaken the idea of disorderly interference. The task, thenceforth, laid upon the rigidly orthodox school of science was clear enough. They must prove that evolution can be explained satisfactorily from the

standpoint of physical forces alone, or failing this, they must be reduced to holding their dogma of pan-mechanism as a very questionable matter of faith.

There was a distinguished group of scientific moderates, if we may so call them, who never held the extreme position with regard to the sufficiency of physical forces. While accepting the great fact of evolution as a legitimate outcome of the inductive method, they refused to subscribe to the denial of anything beyond physical forces. The belief in a great intelligence as the cause of evolution is quite compatible, they held, with all the facts on which that doctrine is founded. This attitude of eminent scientists gave great comfort to theology. In the midst of all the disarrangements introduced by evolution there was hope of coming to terms with it. But probably no one, in the earlier stages of the great controversy, dreamed that this new and strange doctrine might provide the medium for a theological renaissance, that it could furnish the positive, constructive principles for a stable and living orthodoxy.

Not at the beginning, but at the end of the great effort to prove the sufficiency of physical causes, could this aspect of the case appear. The history of this effort is of the greatest interest and significance. It would be a most valuable contribution to modern thought if some one, amply equipped, could give a full and impartial

account of it. In the meantime the general trend of it is pretty clearly defined, and in a subsequent chapter I shall try to outline its most salient features and emphasize the important deductions that flow from them. But before we enter upon this, it seems worth while to pass in review some of the general characteristics of evolution in its bearing upon religious thought.

CHAPTER III

GENERAL ASPECTS OF EVOLUTION

ASSUMING evolution to be true, it is a very great truth,—a truth that most profoundly affects our views not only of what the past of the world has been, but what its meaning is and what its future is to be. It is, in one sense, the greatest of all the revelations that have successively dawned upon the mind of man. It is the greatest, that is, in the sense of being a whole, all-embracing revelation, and at the same time one that is pregnant with possibilities of truth yet to be revealed. It is the greatest in that it includes all other revelations and immensely augments their value by giving them their proper setting as parts of one great world manifestation.

The installation of this great principle has been in itself a signal triumph of the inductive method guided by analogy. Suggested by the phenomena of reproduction and growth, it found a place in Greek philosophy five hundred years before Christ. Through all the ages it was re-suggested and fostered by the ever-recurrent miracle of life issuing from the apparently lifeless

material of the egg. But it held its place only as a fancy of the human imagination till the growth of modern science, by the convergent testimony of its many departments, substantiated the dream and gave it a place of honour among its well-attested realities. We cannot linger upon this most interesting phase of it, for we are primarily concerned here, not with how it came to be, but with what it is, and especially with its claim to our confidence as a guide in the great matters of theology and religion.

I

The influence of evolution upon theology presents itself in a threefold aspect. First, as destructive, second, as transforming, and third, as constructive; and the order of this statement is, at the same time, the order of their relative importance and of the attention which, as three stages of development, they have successively received.

When, half a century ago, evolution was offered as an explanation of the world, the destructive aspect of it, as regards theology, was about all that a considerable element in the church could see. Here was an interpretation of things that was nothing less than a flat contradiction of revealed truth. It seemed to strike at the roots of a belief in God as the Creator of the world. It assailed that cornerstone of theology — the fall and total depravity of man — and, in its materialistic form, seemed to extinguish all religion.

Men forged no end of hastily constructed and easily demolished arguments against it, and then, in their despair, let it alone. But the more patient among them studied and tried to understand its bearings upon what the religious world had hitherto held as truth, and it was seen to have many helpful outlooks. Gradually, but steadily, the new doctrine found its way into every department of thought, making over without violence some of our fundamental conceptions. The destructive aspect began to fade before the transforming. Truths that seemed to have disappeared returned in different guise. We recognized them as the same old truths, yet not the same. They were like wanderers who, having gained experience in their absence, come back to us with wider outlooks and prophetic eyes.

The importance of this process cannot easily be exaggerated, yet as related to the third stage it is distinctly subsidiary and preparatory. Upon this third stage, the constructive, we have as yet hardly entered. Many have dreamed of its possibilities, but for the most part they remain undeveloped.

The chief concern, both of philosophy and theology, is to systemize our knowledge of the world, to bring it into such a unified, homogeneous scheme of thought that every part of it shall support every other part. To achieve such a conception of the world and of our position in it, is a craving of the mind that will not down.

Until we reach it, the different aspects of the world fight against each other, each one casting doubt upon and invalidating the others. Hitherto philosophy has sought to reach this much-desired synthesis by the analytic method. Some fundamental principle, it was hoped, might be discovered, by the dissection of our knowledge, from which to deduce our convictions about the world. But neither rest, nor guidance for the human soul, has been reached by this dismembering process. Laboriously constructed systems have been formulated, but when these have been brought to the test they have, one and all, proved to be misfits. They have produced in their constructions only one side of reality: now, the reality of the world of things as known from the outside, now, that of the world of thoughts as seen from within; the other side, being logically excluded, was necessarily reduced to illusion.

The persistent recurrence of this failure gradually opened the eyes of philosophers to the fact that the method itself was at fault, that the principles reached by analysis were not, in any sense, realities, but only abstractions, fragments of the complex realities of experience, which could produce nothing but fragmentary systems bristling with antagonisms.

But, now, evolution laying at the feet of philosophy and theology an achieved synthesis of real knowledge, provides for their use an instrument on which they have bestowed no labour. It is not

indeed the same kind of a synthesis as that sought by philosophy. It has nothing to say to the antinomies and deadlocks of the abstractionists and logicians. It is a *real* synthesis, — one great fact made up of all the facts of the universe. In its comprehensive scheme all things are seen to be related, parts of each other. There are no exceptions to it. It is informed by one spirit, harmonized by great laws that govern it throughout. It is the disclosure of the methods by which the totality of things has come into being, and presumably of the methods that will prevail in all future development. This synthesis is not a theology, but it is the trustworthy framework for one. We shall make it our chart and our guide through the intricacies of the constructions that we have to formulate, and come back to it as the touchstone of our work.

But, before entering upon this work in detail, some statement of the more general aspects of evolution, in its bearing upon the conceptions and incentives of religion, seems desirable. And in the presentation of these I must anticipate the argument by assuming, tentatively, that evolution reveals to us a Supreme Intelligence that is working toward ends of transcendent value.

II

First, as to its bearing upon the idea of revelation. Our inherited theology assumed that a

revelation from God to men must be a thing foreign to the natural order, — an irruption into it. It must be special in its nature and given under special and miraculous circumstances. It must be vouched for not only by the internal testimony of its value, its convincing power, but also by supernatural accessories that should give it the status of finality and authority. Such a revelation, it was held, had been given, once for all, committed to writing, and further put into the keeping of a consecrated body of men who were the only trustworthy interpreters of it. But at the same time another, inferior kind of revelation, coincident with the order of nature, was recognized. The innate moral sense of man was the source of such a revelation, and the works of God in the midst of which he lived was, more or less, its corroboration.

In the early part of the eighteenth century a group of men, who passed into history under the name of Deists, conceived the idea of shifting religious faith from its old foundation to this latter kind of revelation. Impressed with the fact that belief in the former was waning, and seeing in this the threatened collapse of all religion, they sought to work out from natural sources an independent foundation for its essential doctrines. Neither Church nor Scripture, it was held, was necessary for a liveable knowledge of God, since He was continually declaring Himself both in nature and in the consciences of men.

In so far as they were affirmative the fundamental assumptions of these men were a move in the right direction. But their outlook was narrow and their negations reacted with disastrous consequences. The whole view of the world had to be changed before their scheme could have a chance of success. The imaginations of men were dominated by the conception of a God who dwelt apart from the world and manifested Himself in it only at critical intervals and in extraordinary ways. The innovators themselves were only partially emancipated from the spell. They shared the limitation of view that accepted the oppositions of their day as final and irreducible. They could not rise to that higher synthesis that sees in such contradictions only one-sided aspects of the truth. Because the claim of the Church to absolute, exclusive authority seemed to them unfounded, they were unable to allow to the body of truth which it represented any special value.

Looked at from the higher point of view, which they could not reach, the antagonism between what the Deists called human reason and revelation disappears. They are, at bottom, one. They are different workings of the same spirit. They are both the outcome of the divine influence operating through the faculties of man. They are both revelations of God to man, and they must work toward the same end. They corroborate each other.

The witness of the human spirit to the reality

and character of God, uttered centuries ago and established in the consciousness of the race by the recognition of its truth, bears somewhat the same relation to modern thought that the experience-bought body of common-sense, by which we live, bears to the additional knowledge that is every day flowing in upon us. We do not, if we are sane, pour contempt upon the organized body of our practical beliefs, because they have to be modified to adjust them to such additional knowledge. Except for the possession of such a compacted, articulated consensus of belief we should have nothing to make our new knowledge intelligible. All our working intelligence is based upon a knowledge of relations, and if we have no defined, abiding body of practical certainty to which our new facts stand in some sort of relation, they are devoid of meaning. They flow into and out of our ken, leaving no trace behind. We may believe that quadrupeds and birds see the same things in our common environment that we see. But they cannot see these in the same way, because of the absence of antecedent knowledge to which to relate them.

The body of essential spiritual beliefs that we have inherited from the past are, like the convictions of our practical common-sense, part and parcel of our lives. They have been tested through all the ages and found to work. However we may try to ignore them theoretically, or explain them away scientifically or logically,

they are still with us, cropping up in a thousand different forms, when we least expect them. We cannot get rid of them, because we are essentially the same kind of men as those through whom they first found utterance. Unless those who first put these transcendent beliefs into words and those who originally accepted and lived in the light of them had been endued with the same spiritual instincts, these revelations would have been stillborn utterances, the idle sayings of unbalanced minds; and unless the generations following had continued of like natures, having the same religious needs and insights, they would have been utterly unable to retain them. The divine light that in former days streamed from prophets and poets was latent in other human souls. The seers called it into activity, and it has never ceased to shine, because it is ever renewed from the same divine source.

God has not spoken once or twice, He has not made one, or two, or three revelations. He is always speaking, always revealing Himself, and in every age more fully and clearly. The old light is not quenched, but made incomparably brighter. The later illuminations disclose continually new values in those of a former day. The original reception of our inherited spiritual beliefs was the response of soul to soul, but it is *use* that has established them, the test of life's wear and tear that has made them an inseparable part of our moral consciousness.

It is a great mistake to think of the efforts of the Deists as altogether failures. They bore some good fruit in their time. They not only kept men's minds busy with the essentials of religion, but they established some of the fundamental positions on which the use of their method hinges. They established them so firmly that their opponents, the advocates of a special, miraculously revealed religion, were constrained to use the same method to establish the credibility of their position. It was a continuity when Bishop Butler, whom Chalmers calls the "Bacon of theology," gave to the world his great work "The Analogy of Religion." *

But, as we have implied, a use of the same method to-day would move on radically different lines and build with much new material. The perspective that has been introduced into all our views of things by the discovery of evolution is, in itself, a great transforming influence, and the study of the nature and history of the writings that constitute our Bible has also done much to sweep away the barrier that separates what the older controvertialists held to be two kinds of religion, — natural and revealed. With our wider outlook, these two diverse sources of religion merge into one. There is one great and all-comprehensive revelation, continuous, homogeneous, and consistent in its methods, just as there is one world-process. We are differently related to

* Mark Pattison, "Essays and Reviews."

different parts of it, knowing some from within, subjectively, knowing others by observation and study from without. We might be tempted to say that natural religion has absorbed revealed, because its methods must eventually prevail in both departments. But a truer expression of the change would be to say that all religion is the outcome of one continuous world-revelation, and that the most luminous part of this is that which appeals directly to man's religious consciousness.

The claim of a supernatural revelation, different in kind from all others, had a great truth at the heart of it. For, in the race from which our religion has come to us, there was an early development of God-consciousness that is unique in human history. Individuals sprang from that simple and crude civilization who seem to have had very little in common with it. Their deep and assured visions of spiritual truth, their fervid utterances, and their intense convictions were like new elements in human evolution.

But, on the other hand, the seers and the prophets were not separated from subsequent generations by any radical peculiarity. God revealed Himself in the consciousness of these great lights of the world by the same methods as those by which He reveals Himself in the moral and religious consciousness of every man. The light that shone in them with such intensity was not, in any way, other than that which "lighteth every man that cometh into the world." Had it

been otherwise, how should the world have known that these men spoke the truth of God? It is because this light dwells in humanity at large, not because it is something foreign to its nature and beyond its comprehension, that we are able to take the revelations that came through these men to our hearts and feel sure that we make no mistake when we fall down and worship the God they have made known to us.

III

A second characteristic of evolution, when used constructively in the science of theology, is that it vitalizes at the same time that it rectifies our old beliefs. An inherent source of weakness in our established theology has been its apparent contradictions, and our efforts to reconcile these, without transforming its doctrines, have been unavailing. At times it has seemed to have become a matter of the survival of the fittest: some of them might be retained if others were discarded; but again it has looked as if all must be rejected and a new beginning made. I think we may say that these antagonisms have been owing, partly to the narrow outlooks and applications of the separate doctrines, partly to the relations in which they have stood to each other, but mainly and essentially to the fact that they have been produced in an intellectual atmosphere of unreality by the use of abstractions. The defect in our system is a radical one, and it can

be overcome by no manipulation of details, but only by a change as radical as the fallacy from which it springs.

Evolution offers a deliverance from this reign of inconsequence and disorder by providing the means for the transference of the whole body of our religious truth from a rationalistic to an actualistic basis. It is not the abrogation of vital principles that confronts us, but their restatement, readjustment, and derivation from legitimate and verifiable sources. Evolution, while transforming our inherited doctrines, leaves all the incentives to religion which they contain not only alive, but much more alive than under the old regime.

It does this, first, by setting our intellectual house in order, by giving us coherence and continuity in the place of dislocations and inconsistencies. It *must* do this if we trust to it; for it is itself a disclosure of the continuity and coherence of all things. The escape from the old intellectual order into the new is like being brought from the dimness of a prison into the broad light of day. It may take a little time to accustom our eyes to the new conditions. But the light was made for the eye and the eye for the light, and unless the eye be fatally injured by disuse, the light will reveal to it a new heaven and a new earth and generate a new courage and a new joy in living. With a changed conception of the relations which God sustains to His

world, one doctrine after another, purged of its impurities and limitations, falls into place. We have a story of the past that is coherent, and a look into the future that is, to the last degree, inspiring and sustaining.

What are the chief requirements of a satisfactory religion? What do we demand that it shall do for us? I will venture, in a comprehensive way, to answer, We ask that it shall give us something worth living for, something that is definite, and at the same time not too difficult. It must be something hard to achieve, but not impossible. It must be an ideal good that promises to us progressive realization. It must be difficult enough to awaken all our powers and ambitions. It must appear sufficiently practicable to keep our courage and enthusiasm aglow. It must call into action every department of the higher nature. The intellect must have its share. There must be problems for solution, unexplored regions to be opened and developed. The emotional nature must find in it a full and persistent satisfaction. It must not only rouse love and loyalty, it must develop, increase, and sustain them. It must, in a word, be inexhaustible.

An adequate religion will be so adapted to our human needs that it will minister equally to the static, quiescent, contemplative side of our nature and to the dynamic, energetic, undertaking side of it. It is to the bearing of evolution upon this latter requirement that I would call

attention here. It points most unmistakably and persistently to a future good to be achieved. Great as is the light that it sends back into the past, that which it sends streaming into the future is a matter of far intenser interest and greater value to the human race. In it the past, the present, and the future are brought together into one homogeneous whole. There is one grand progressive movement from the beginning to the farthest limits of our imaginations, — one theme and one all-sufficient God, who, in a world of conflict and through conflict, has carried His creation from one stage of achievement to another.

This aspect of the situation is fitted to call out all that is strong and noble and aspiring within us. Here is man with a bewildering wealth of powers, natural and acquired, surrounded by an accumulation of inherited materials, mental and physical, — a superb equipment for the accomplishment of some great end. What shall it be? The great world-process, to the knowledge of which he has but just come, has an answer ready for him. It declares man to be a factor in a not-yet-completed process. The process is matter of history. The incompleteness is no less so. All human experience has testified to it, and the insistent reaching out for further realization is a continued endorsement of the assumption that the accomplishment of the future of evolution depends very largely upon man himself.

Pre-eminent among his powers is that of forecasting the future, so as to be able to shape wisely his activities with reference to it. His study of the past is mainly valuable as it contributes to the enlargement of this power by supplying materials for its use. Every step upward in his long career has been characterized by an increase of this ability to shape his future, and with this increase a larger measure of responsibility has been laid upon him. With the knowledge of evolution there has come a tremendous increase of it. Hitherto this power has had reference to parts of his life, to his development or achievement in this direction or in that. Now, it addresses itself to the one supreme issue of the great process of which he must believe himself to be the latest and highest product and, under God, the most important factor.

Is it possible for us so to forecast this future as to attain to a practical, helpful knowledge of the direction that further evolution must take? I believe this to be not only possible, but also the great and necessary work of the present day, — a work that we cannot shirk without giving away our birthright. We have found many uses for our God-given intelligence in the past, we have served our smaller interests with it, and now that a task of far greater range and import has been appointed to us we cannot turn aside without dishonour.

It is rather overwhelming to the imagination,

this work which evolution lays upon us, and we shall not accomplish it in a moment. As in the prosecution of the quests of purely physical science, we shall probably have to form many hypotheses before we reach one which proves altogether workable. But, evolution is not an inexorably hard taskmaster. Though it provides us with a great problem, it at the same time supplies new and most helpful conditions for its solution. The questions which the old theology set itself to answer ranged through the regions of infinity and eternity, they concerned themselves with the mysteries of ontology. But, if our problem is deep and wide, as related to our intellects, it is quite within the sphere of human knowledge and experience and is propounded to us in terms of actuality. We are brought back, by a sudden discovery, into a wonted way. Our conceptions are called in from wandering to and fro through the universe to concentrate themselves upon limited and measurable interests.

The great process with which we have to do presents us not with a universal problem, but with one cycle of it. It is a matter of this earth with which we are concerned. As in pre-Copernican days, we may think of our little planet, if not as *the* centre, at least as *our* centre. We may exercise our imaginations and form our conjectures as to what great cycles of evolution lie beyond and comprehend ours, but these

speculations are of no vital importance to us. The drama of evolution with which we are acquainted and of which we are a part has had its beginnings here on our earth. Here it has grown from what, to our apprehension, was absolutely without life into the fullness of the diversified and organized existence in the midst of which we find ourselves. The history of the process from inorganic matter, through all the ascending stages of existence, is our history. We are the highest outcome of it all. The value and significance of it is in us and in what we are to become.

The fact that this field has been already exploited with unsatisfactory, and sometimes deplorable, results should not deter us from further endeavours in the same direction nor damp our ardour. We cannot question the proposition that a well-founded knowledge of the way that future evolution is to take would be an inestimable benefit to us: the converse of this is equally worth emphasizing. A false conception of it is a matter of very great, though it may be temporary, evil. As the one tends to the achievement of the higher life that is to be, so the other tends to degeneration. And since it is clear that the human mind has reached a point where it will not let this subject alone, there is all the more need that we bring to bear upon it all our powers of criticism and construction. If any man thinks he sees a better way of interpreting the indications

that point to a higher stage of the great process, he should give it to the reading public for what it is worth.

In subsequent chapters I shall give my reasons for setting aside, as unsatisfactory, the attempts that have been made to forecast the future of evolution in the line of corporate developments, and also that one that traces it in the line of physical heredity. As regards corporate developments, whether bodied forth in dreams of a perfected social order or of a triumphant Church, I have no controversy except as they offer themselves as the highest outcome in sight, — as the ultimate object of inspiration and effort. That the social organism has had a great career and is destined to have a still greater one cannot be questioned, and the same is true of the Church. But I shall try to show that both are only subsidiary, instrumental, passing phases of evolution, and that the highest values of the process must be sought in the sphere of the individual; in short, that they can be neither expressed nor realized except in terms of personality and character.

If it shall appear that this view is well founded, if in the course of our argument it shall stand approved as the only workable hypothesis, the whole volume of evidence as regards the continuation of the great process narrows itself down to some most important implications.

IV

The first of these to which I will call attention has reference to a continuation of life beyond the grave for some members of the human race. If evolution is to realize itself in the line of human personality, such a continuance is a necessary element in any hypothetical construction of the future. It is impossible to think the facts together otherwise.

Could we accept Nietzsche's scheme of future evolution, which moves on the line of physical heredity, there would be no need to postulate such a continuance. Formulated in accordance with ideas that have had their rise in the lower stages of evolution, this hypothesis culminates at a point short of the limits already reached. But if, in accord with the cumulative experience of the ages, we discern the highest reaches of the human soul in those qualities that have always been worshipped as the highest, both within the confines of Christianity and outside of it, we must trace the way that evolution is to take through and beyond the barrier that the dissolution of our physical organs has erected for the limitation of our thought.

The fact that experience fails to throw light upon the *forms* or *conditions* of the life beyond the grave is no reason for not believing in its existence. Evolution is full of transformations as startling, as apparently impossible, from the

standpoint of all that has preceded them. Science is continually forced into hypotheses of this nature and accepts the situation in the faith that its constructions, if not the whole truth, are in the direction of truth. In the light of what we know of the great process, the belief in life beyond the grave for some human souls presents nothing like so great difficulties as its opposite; that is, the belief that evolution is culminating in such an unfinished, inconsequent, abortive product as mundane man. To entertain such an hypothesis makes man shrink to ignoble proportions and the process itself appear as a vast and tragic blunder. Reason, experience, science, and the wisdom of common-sense reject it as an unworkable hypothesis.

A second inference from the assumption that evolution must find its realization in the line of personality has reference to the doctrine of the new birth. New birth is the commonplace of evolution. Life at each of its various stages reaches a point beyond which there is no further progress except on condition of its realization. "Ye must be born again" is over the portal of every avenue to the next higher stage. Apparently, until man is reached, the continuation of the process is not in the line of the individual, but in that of the genetic order. The new creature is not the continuation of the old. The old type remains at the lower level and a new type has somehow emerged from it. But if, in accordance

with our hypothesis, the new birth of the human era takes place in the sphere of the individual, we may see in it the actuality of that transformation that is affirmed in our theology, and we may not only look forward to a succession of new births, but find ourselves in the very midst of new-birth realization; those which we know being but the earnest of those which are yet in the undeveloped future of the process.

These two doctrines, that of life beyond the grave and that of the new birth, march together. The great significance of each depends upon its union with the other. The value fades from either without the assurance of its associate. Mere continuance of existence has its questionable, not to say forbidding, aspects. Except there be the prospect of a persistently improving life, a something better to be looked forward to with successive realizations that yet never exhaust possibilities, the thought of a future life is devoid of inspiration; and moreover, the anticipation of it is without grounds.

Now let us observe that these two beliefs are associated in several quite distinct relations. In the first place they are the two which evolution with the whole volume of its cumulative evidence endorses. In the second place they are the two that stand out as the distinctive doctrines of Christianity, marking its advance upon the older religion from which it was derived. In the third place they are the two that are ordinarily

instanced as the most conspicuous examples of a class of doctrines not given in human experience, but dependent for their maintenance upon an external revelation, vouched for by extraordinary events. In the fourth place they find their unmistakable counterparts in the other Oriental religions that competed with Christianity for the control of the Roman Empire. Mithraism and the religion of Isis, offshoots respectively of the ancient religions of Persia and Egypt, made both these doctrines prominent.

Out of the many reflections which this combination of circumstances is fitted to suggest I will call attention to one only; namely, its bearing upon the relative evidential value of testimony derived, on the one hand, from alleged extraordinary events of history and, on the other, from the main trend of the whole course of history as established by scientific methods. In the one case, that of the extraordinary event, or events, the advance of knowledge and thought is continually confronting us with new difficulties, loosening the foundations which a former age found secure enough. On the other hand we hold those vital doctrines with ever-increasing strength and efficiency, and the confidence, derived from progressive endorsement, inspires us at every step.

CHAPTER IV

THE PROCESS AND ITS INTERPRETATION

THEOLOGY has, for the most part, observed a studied reticence with regard to evolution. When the necessity of frankly facing our relations to it has been urged, the customary rejoinder has been: — We are not in a position to come to definite terms with this great generalization of science, because we do not yet know what it is; no satisfactory explanation of it has yet been given, and it will be soon enough to adjust our inherited beliefs to it when such explanations have been reached.

In opposition to this attitude, I will venture to affirm that we know more about evolution than we do about most of the generalizations with which we have to deal, far more than we do about the nebulous realms of infinity in which theologians of an earlier day found themselves so much at home. We know more about it, because it deals with real things, actualities that can be tested and verified, and because it is the result of an immense amount of patient, persistent investigation. That we cannot know everything about it, is no excuse for not knowing all that it

is possible to know. Since it has come to stay and dominate our thought, our knowledge of it should be as clearly defined as the nature of the case admits.

I

A first and most important step toward the understanding of the relations of evolution to theology is to clearly discriminate between the process itself and its interpretation. Darwinism is not evolution. Spencerism is not evolution. Each is, in its way, a luminous illustration of it, accompanied by and interwoven with an interpretation. This has been the cause of great misapprehension and confusion with regard to the doctrine itself, so that the separation of the two must be our first task.

What then is evolution? It is, in its simplest statement, the process by which all things have come to be what they are. As a doctrine it was originally suggested by, and is primarily derived from analogy.* It does not admit of demonstration other than that of the practical sort. It appeals to the intellectual judgment of men by the concurrence of several lines of testimony emanating from different sources. The original statement of the doctrine, as an inference derived analogically from a comparison of three series of

* The extent of this indebtedness to analogy, and the parallel which it presents to the derivation of the doctrine of God, is discussed in Appendix *A*.

organic forms, called the *taxonomic*, the *phylogenetic*, and the *ontogenetic*, was the apparent contradiction of a number of stubborn facts with which the world had long been familiar and regarded as ultimate. Prominent among these was the separation of contemporary species by impassable clefts in the continuity of animal life. The first and great work of the advocates of the doctrine was to remove if possible what seemed to be a fatal objection to it. This work was pursued with patience and skill in different departments of science, each one bringing some valuable contribution to it. The discovery of intermediate forms, hitherto unsuspected, the existence of rudimentary organs in the higher animals, the close resemblance of the successive embryonic stages of a complex organism to the adult forms of lower orders — these and other evidences, contributed by the sober, plodding work of research, constituted the distinctly scientific business of evolution.

But in the course of this a number of well-defined questions emerged which were answered in different ways by different scientists. Some of these are as follows. First, Are the changes which lead from one species to another always gradual, or is evolution characterized by distinctly new departures of great significance? Second, Are the most efficient factors in the process those working from within the organism or those which influence and shape it from the outside?

Third, Does intelligence play any part in the process? And if so, is it that of the creature alone, or must we assume also the working of a higher wisdom, an indwelling and directing power, that has shaped the process from the beginning?

These three questions, though closely connected with the main scientific issue, must be sharply distinguished from it. They were concerned with science only at second hand, they were very largely speculative, they had to do with causes and origins. They gave rise to very divergent hypotheses, none of which could be substantiated nor, on the other hand, disproved by scientific methods. Each was, in its way, an attempted explanation, in whole or in part, of the doctrine which was now assumed to be true. And it is here that theology and the extreme school of science join issue.

Now, because the controversies to which these questions have given rise are mainly speculative, shall we say they are of small importance, — battles in the air, questions that can never be satisfactorily answered, and therefore unprofitable? In opposition to such a view I will venture to affirm that these questions constitute the most vitally important, the most practically valuable fruits of evolution. And further, that far from being unanswerable questions, they admit of solutions in which the mind of the average man as well as that of the most highly trained can find satisfaction and power. In justification of this

position I will premise, first, that our ordinary idea of science, the one which we have hitherto admitted, is far too limited.

Science is grounded upon facts carefully sifted and rigorously interpreted, but this is not the whole of it. This is only its basement, above which there are upper stories to which we may climb by the stairways of analogy,— stairways that we have to construct for ourselves and which must be most carefully built to enable us to reach the higher levels from which we can sweep wider horizons and elaborate larger plans for the conduct of life.

Does this sound visionary? It well may, for what is more misleading than analogy? Does it not lure us into all sorts of blind alleys and leave us to find our way out as best we can? Does it not encourage us to attempt stairways where the feet stumble as they seek to climb? It surely is so. There are analogies and analogies. Some of them are, to change the figure, the most shifty, inconsequent, misleading guides. Some of them are horribly tyrannical when they get the upper hand of us. They hoodwink and deceive us; they hypnotize us into seeing things with their eyes, all the while believing that we are seeing them with our own. But, on the other hand, there are analogies that are to be trusted. These are the only guides beyond immediate experience; we never get anywhere without them. We are so used to depending upon them that we follow them for the most part unconsciously.

To return now to the various and divergent explanations of the causes of evolution; let us observe that each one of these, the lame, the halt, and the blind, as well as those that move with a good degree of success toward the mark, is under the guidance and dominating influence of *some* analogy. In what follows I shall try to show how it is possible to discriminate between the reliable and the unreliable, the true and the false, in the use of the analogical method.

The chief source of error in the employment of analogy is to be found in the choice of the analogue from which it takes its departure. Our most misleading analogies are so because they are produced from a fragment of reality instead of from the largest, most comprehensive whole that we have hitherto conceived. The analogy that is derived from such an abstracted fragment of knowledge may be very satisfying to a mind that concentrates its attention upon this one aspect of reality to the exclusion of all else. But as soon as this mind returns from the isolation of the departmental view to the concrete, many-sided world of experience, the satisfaction somehow evaporates from its constructions.

In our ordinary conception of the world we carry with us a dualistic thought of it. It is made up, we say, of mind and matter. There are physical, mechanical forces, there are psychical, spiritual forces. This discrimination of two departments serves us both in the practical affairs

of life and also in the pursuit of scientific research. For successful results in the investigation of natural, that is to say, physical causes, we must isolate these from all those influences which we call psychical, just as in studying a machine for the understanding of the bearing of its different parts on each other we shut out from our consciousness all reference to the relations which it sustains to the mind that made it, or to the intelligence that runs it, or to the electricity, or steam, that supplies it with energy. But, this isolation is only provisional, it stands for no independent reality. The machine or, on a larger scale, the vast aggregate of physical forces that make up the world of instrumentality are, in themselves considered, only fragments, aspects of greater concrete wholes that must be taken into account before we can begin to understand their significance.

The book which I hold in my hand is, from one point of view, a thing complete in itself. But in another and much more important sense it is not a book at all; it is a combination of paper, binding, and printed characters. The real book is a purely psychical thing, a message conveyed from one mind to another. This seems almost too simple to be worth writing about. But it is in default of recognizing just this simple truth that some of the greatest controversies have arisen.

The conception of the world as purely spiritual

is without foundation in fact; the conception of it as purely mechanical is equally so. In both cases it rests upon a deceptive analogy produced from a fractional representation of reality, and therefore no reality in itself. The traditional concept of the world as the direct outcome of pure thought and will, without the intervention of instrumentalities, had no real experience to rest upon. It was the experimentally formed idea of creation, with the indispensable conditions of that experience shorn off from it. It was a dream, a fancy emanating in fairyland. It held men through their imaginations, but when it came into vigorous contact with realistic thought, it faded out of sight.

But, let us observe, the conception of a world created by purely mechanical forces, without mind, is not only equally false, but much more difficult of assimilation, because the whole idea of efficient cause had its origin in the self-conscious action of intelligence and will. But here the initial factor in the process has been dropped. A world emanating from pure mechanism is not simply fanciful, it is monstrous.

How then shall we reach any trustworthy conception of the truth with regard to creation? How shall we get these two divergent aspects together? Shall we say that they are only the two faces of one ultimate, underlying reality that is unknown to us except through these opposites? To say this is only to obscure thought with words. Each

side in the controversy, if it takes refuge in such a formula, sees its side as the reality and the other as the illusive appearance. There is another way, the simple common-sense way of retracing our steps to the point from whence these divergent aspects of the real took their rise, and by studying them both together in their actual, concrete relations to each other.

The mechanical interpretation of the world and of evolution has taken its rise in man-made machinery. Every mechanical contrivance, before it existed as a thing separate from its inventor, existed in a different form in his cerebrum. It was originally an organization of nerve-cells in his brain, and it was organized there by mind. Mind is its vital principle. Separated from that vital principle it is a dead thing which cannot explain itself, much less the universe. How can we wonder that a universe interpreted by such a mutilation should be found destitute of mind? Necessarily, the power that moves it is declared to be unknowable, and that, manifestly and wholly, because the well-known cause and originating principle of mechanism was subtracted from it before its application to the greatest of analogical undertakings.

When we give ourselves to the investigation of a man-made machine, we find it absolutely complete in itself. The world of organized physical forces can, as we have said, also be studied in separation from the thought of mind. In fact it must be so

studied for the accomplishment of the ends of physical science. And for this purpose the employment of the concept is not only justifiable but most useful. But when, rising to a higher point of view, we seek a concept that shall be inclusive of those two great realms of reality that stand apart from each other in our analytical thought, our only chance of success lies in restoring to the concept mechanism the other vital half of reality that we have temporarily neglected. When we have grasped these two halves of reality in one concept, as in our thought of personality we unite soul and body, we have a mechanical universe that is instinct with mind: not a machine that has emerged out of the absolutely unknown, self-sufficing and self-adjusting, but a mechanism alive with the thought and potency of its originator. It is an established order of things displaying great uniformity of action, but it is also a moving, growing order.

We could not have a better illustration and verification of the truth of the above principle than that afforded by the history of the efforts to explain evolution without the recognition of an indwelling mind. They have failed most signally both from the side of biology and from the side of physics. During the last half of the nineteenth century the pan-mechanical view of the world scored its greatest triumphs, and also, quite aside from the considerations above advanced, worked out its own discomfiture.

I will endeavour to show, in as few words as possible, how this came to pass. In physics it was the direct result of an apparent demonstration of the thesis that man's belief in his own mind as the efficient cause of anything is a delusion. The course of reasoning was something as follows. The multiplicity of forces in the midst of which we live, — motion, heat, light, electricity, chemical affinity, etc., — though they seem to us to have no community of nature, are, in fact, different forms of one persistent power. They have been demonstrated to be different modes of motion that are all convertible into each other. And further, those other forms of energy that we call sensation, emotion, thought, will, are, in no wise, of a different nature; they also are transformable into the above-mentioned modes of motion. Now, add to this the consideration that the physical power of the universe never suffers diminution or increase, and we have before us the data upon which the argument for the exclusion of mental causation from the world of real things is based. It is said to be demonstrated that mental phenomena cannot be a result outside the physical chain, because, if any portion of the stream of energy were diverted from its course for the production of mind, that portion would disappear and the physical consequents would cease to be the equivalents of their physical antecedents.

Thus it was made to appear that science ne-

cessitates the banishment from the universe of all such concepts as that of mental causation. Herbert Spencer did not hesitate to adopt this conclusion and Professor Huxley had no reserves with regard to it. He declared that consciousness had absolutely no power of modifying events. "We are," he says, "conscious automata, . . . parts of the great series of cause and effect which, in unbroken continuity, compose that which is and has been and shall be."* And again: "Any one who is acquainted with the history of science will admit that its progress in all ages, meant and, now more than ever, means, the extension of what we call matter and causation, and the concomitant banishment from all regions of human thought of what we call spirit and spontaneity." †

Now, so long as the denial of spiritual influences concerned itself with such matters as the invasion of the order of nature by miraculous interpositions, or the belief in specific answers to prayer, — matters lying quite outside the sphere of verification through unquestioned experiences, — it did not accomplish its own undoing. Men deferred to it provisionally. Many were ready to surrender the most vital of their religious beliefs to it. But when the ever-widening generalizations of science, with their categorical inclusions and exclusions, brought physicists to the above ultimatum, the vision of an unmodifiable order faded

* "Science and Culture," pp. 243 and 246.

† "The Fortnightly Review," February, 1869.

out of sight. The limit had been reached suddenly, and the argument, so to speak, broke its neck.

For, when the assumption of the sufficiency and all-inclusiveness of physical causation came to abut upon personal experience, it was seen to be the flat contradiction of the fundamental realities of life. Every one of us is daily living the negation of that which this assumption affirms. Our activities as related both to things and to people are the practical, indefeasible demonstration of the proposition that efficiency, direction of energy toward definite ends, purposive modifications of every kind, have their rise, not in mechanism, but in mind, — in that very department of reality that the physicists declare to be non-existant. What we are obliged to live, that we must necessarily believe. From the standpoint of physics or, for that matter, from any standpoint, it is impossible for us to explain *how* mind gets its hold upon and uses its instrumentalities, how it ever invents and controls a machine. But in our actual experience we know that it does do it.

Thus, simply by production to its ultimate and necessary conclusions, the mechanical theory settled itself, and great was the relief to sane thinking. It was as when a man is held in the grip of a paralysing nightmare. He tries to speak, but something prevents; he tries to move, but there is no response to his will. The agony increases till the point of greatest tension is

reached; then, as by a supreme shock, the spell is broken. The sleeper awakes and assures himself that he is a free man.

But, thus far, the world of speculative thought is no more than half-awake to the importance of its emancipation. It is, to theology, a restoration of liberty after a depressing period of servitude; but the habit of servitude still remains. The deadening influence of determinism lingers, and the echoes of its paralysing dicta reach us as if no revolution in thought had taken place. The impossibility of answers to prayer in a world governed by law is sometimes affirmed and sometimes hesitatingly admitted by those who ought, by this time, to know better.

The breaking of the spell assures man that the order of nature can be and constantly is modified through his initiative; and inseparably linked with this, is the assurance that the God of all the earth can do as much, — that the order of nature can be modified by a supreme mind in touch with it. If we go on believing that our requests, our prayers to our fellowmen can be answered by responsive acts on their part, there is no reason, scientific or otherwise, against the belief that a higher intelligence may be influenced to aid us in the attainment of our desires and legitimate ambitions. As in the one case so in the other, the so-called scientific impossibility of modifying the routine order of nature by intelligence and will has vanished.

II

The story of the struggles of the pan-mechanical explanation of evolution in the department of biology, though more restricted, is in some respects more interesting than that of its fate in the sphere of physics. For here we see men, eminent for their understanding of the ways of nature, exercising all their inventive powers to think into the process of evolution some kind of a mechanical substitute for mind. It was not that the phenomena of the process itself suggested a mechanical solution. For when, with the incoming of evolution, the vision of a world of routine, running its everlasting mechanical round without change, had become transformed into that of a world of constantly new beginnings and new departures, in the interests of an ever-increasing organization, the familiar analogies of experience suggested, nay, even seemed to necessitate, the recognition of a designing intelligence directing to some extent the play of natural forces. But to all such suggestions a deaf ear was turned at the behest of the grand, all-embracing mechanical theory. They embodied an easy, popular mode of interpretation, but, they must be popular delusions. They were not scientific.

Darwin made a marvellously elaborate and brilliant attempt toward the solution of the difficulty, but it was not a success. Science was quick to rn its deficiencies. On every side there sprang

up those who recognized the fact that Darwin had told but one side of the story. It was clear that, while his whole thought and enthusiasm had been devoted to tracing the influence of the external factors of the process, the all-important agency of the internal factors had been minimized almost to the vanishing point. The protest against this one-sided view took a variety of forms among those who were as anxious as Darwin himself to explain the process without the recognition of a separate guiding intelligence.

All those processes of the physical world such as chemical affinity, organic affinity, crystalization, etc., were exploited. But the sought-for factor, which could take the place of intelligence, proved to be always just out of reach. Then there came a weakening, a disposition to admit assistance from the forbidden realm of psychical causation — a movement that was quickly exposed by others who were equally hard pressed for a principle that would work.

Thus Nägeli assumed the existence in nature of "a law of improvement." According to this law, internal causes work continually toward a greater complexity and greater perfection of organization. He guards this announcement with the assurance that his principle is a purely mechanical one, and that it is the law of the persistence of motion in the field of organic evolution. But of this same principle Eimer, who holds as well as Nägeli to the determining influence of mechanical factors,

says, "Although he explains it as a mechanico-physiological principle, I hold it to be a kind of striving toward a goal or teleology, in face of which a directing power conceived as personal, existing outside material nature and ruling all things, would seem to me fully justified."*

This unavoidable attraction, this compulsion as by a necessity of the human mind toward the one analogy that can explain evolution, is still more interestingly illustrated by that class of theorists who so far surrendered to the demand for intelligent guidance as to avail themselves of it in a modified form. These assume that what we behold in organic evolution cannot be explained without intelligence or consciousness, but that there is no need of postulating a superior being as the source of such intelligence, since the creature is sufficient unto itself. In this there was a swinging back to the conception of Lamarck given to the world a century before the "Origin of Species." It was outlined by Charles Darwin's grandfather in the following terms: "What we call creatures were not created by God, for there is no such being as we imagine by that name, but by themselves, that is, by the process of evolution."

The difficulty of reaching satisfactory results, with the very small outfit of intelligence which we may attribute to animals, is manifest. The wonders of instinct and progressive organization demand for their explanation an intelligence, not

* Organic Evolution, p. 53.

of a lower quality than that of man, but one of a vastly higher quality. To get round this difficulty an intelligence different in kind was postulated. And if different in kind it might, it was imagined, be made to cover all the requirements of the situation. Thus Mr. J. J. Murphy gave us "unconscious intelligence," and Dr. Cope gave us "consciousness and memory," but without intelligence. Of this latter Dr. Cope says, "We are led to the conclusion that evolution is an outgrowth of mind and that mind is the parent of all living forms." But, he explains, "by mind, as the author of the organic world, I mean only the two elements, consciousness and memory."*

Why, common-sense asks, should these two distinguished investigators and theorists set aside the whole and satisfactory analogy of a conscious intelligence residing in nature to make use of that same analogy in a mutilated form? How does the mutilation help them? In no way, except that by it they get the service of the concept intelligence without committing themselves to the implications of it. In a single phrase they combine the affirmation and the denial of the factor which is the mainspring of their explanation of the animated world. They get the use of an intelligence that is not intelligence, of consciousness that is not consciousness. That this is simply conjuring with a contradiction of terms, a

* Origin of the Fittest, p. 230.

mere juggling with words, is made evident by the fact that the formula reads just as well one way as the other. Unintelligent consciousness works the same wonders for Dr. Cope that unconscious intelligence works for Mr. Murphy.

Another exploitation of this idea of unconscious intelligence gained at one time a large following for the philosophy of Edouard von Hartmann. This raised the efficiency so described from the realm of the lower animals to that of an all-comprehensive principle. It was said to be an all-pervading and universally working constructive wisdom, a foreseeing, purposive intelligence informing the whole process. A most elaborate and effective array of the facts necessitating the belief in such an indwelling principle is furnished, and this stands quite apart from the assumption that is attached to it; namely, the assumption that this wisdom of the All-one is unconscious. It is, in fact, theism metamorphosed into pantheism by the affirmation of its unconsciousness.

Here again, common-sense asks, Why is it necessary or reasonable to mutilate the analogy by which alone man can reach a satisfactory explanation of the world? It is, in fact, neither necessary nor reasonable. It is not the former, because all the facts of the world are more truly explained without the mutilation. It is not the latter, because the very same arguments that prove the necessity of postulating the existence of an indwelling wisdom

oblige us, if we admit their soundness, to assume that this same indwelling wisdom is conscious.*

By an irresistible compulsion the human mind, after all its circling round, comes back to the analogy of concrete mind as the one and only vehicle by which it can reach a satisfactory conception of the universe. All its attempts to pierce the empyrean of thought by the use of abstractions have proved as abortive as trying to fly with one wing. And for the clearing away of the mists which hung over this controversy we are deeply indebted to the thoroughness with which the biologists as well as the physicists, who advocated the opposite view, have pressed their claims to ultimate conclusions. But this is very far from being the full statement of our indebtedness.

The same thoroughness of discussion that established the necessity of recognizing an intelligent Creator has, at the same time, increasingly revealed and illustrated the relations which He sustains to His creature world. Its intimate study of purposive action in the animals lower on the scale of development than man, has brought before us aspects of nature that profoundly affect our thought of God. For the farther we carry research in this direction, the more we are impressed with the evidences of an intelligence and foresight in actions of the

* A psychological theory of evolution by a more recent writer is considered in Appendix B.

lower orders of creation which cannot possibly be their intelligence.

The whole of that great class of instincts that cannot be attributed to "lapsed-intelligence" or habit, all those new departures in progressive organization which declare themselves along the course of evolution, all the forms that show structure in anticipation of function—these as well as the phenomena of human consciousness, emphasize the fact of a higher intelligence working with that of the creature and leading its activities to ends of which it could never have dreamed. In other words, evolution discloses a world called into being, not only by a gradual, but also by a co-operative process. Lamarck's idea of the great movement was half true. Creatures do make themselves. But the ampler truth is stated by Charles Kingsley when he says, "We see in evolution God making things make themeslves." And if I mistake not, it is out of this conception, as a living root, that the purest and most indestructible form of religion is destined to grow.

Wide as is the interval which separates man from the orders below him, great as is the contrast between his consciousness and theirs, there is, in respect of co-operative creation, an unbroken continuity. A principle of associated working characterizes the whole process and reveals to us more clearly than any other the meaning and scope of it all. The doctrine of which we have heard so much of late, the immanence of God,

seems, as an applied generalization, perilously near to pantheism, but studied and illustrated by the facts of evolution, it becomes the vital doctrine of a real theology.

Darwin somewhere says that he found himself at times powerfully impelled to recognize the agency of an intelligent mind in the wonderful adaptations of nature, but was deterred from yielding to this because he could not believe that some things were designed and others not. But such a difficulty disappears in the light of our analogy. If we trust ourselves unreservedly to our human experience for the interpretation of God's working in His world, the appearance of design in some relations and its absence in others is not only not surprising, but just the combination we should expect to find. The great volume of our activity, physical and mental, expresses itself in routine action, — the almost unconscious repetition of habit in response to an approximately uniform environment. But this is continually varied by departures, on this side and on that, occasioned by the necessity of adjusting ourselves to a changed environment or for the attainment of some end not, hitherto, contemplated. Both kinds of activity are necessary, the one for stability, and self-preservation, the other for growth and rise in the scale of being.

This is just what we find in evolution — a persistent substratum of uniformity, varied by con-

tinually new departures. Nor do these new departures involve a break in the method. There is perfect continuity, but from the standpoint of a wider principle. As we ascend the scale of being, such qualities as consciousness, foresight, responsibility, increase. There is more and more liberty, a constantly wider field granted to the creature, until, in man, we come to a being who is able to construct an ideal future and direct the stream of his vitality to the attainment of it. But the method remains always the same. Everywhere it is the joint activity of the Creator and his creature offspring. Everywhere we see the efforts of the latter rewarded by responses from the former.

And furthermore, we are indebted to the stimulus that has come to the study of biology, through evolution, for another help of the greatest importance to theology. Even when we restore to the concept mechanism its vital half, it remains a very imperfect instrument with which to measure the relations existing between man and his Maker. The quality of externality is a great flaw. It continually suggests separation, or only *occasional* communication, which is misleading.

But the study of cell-life and of the relations which the wonderfully varied and complex nervous system sustains to the central consciousness of the organism, supplies us with a most satisfactory symbol of the composite relations of the divine and the human. We need no longer think of the

machine and its maker, two strongly contrasted realities that have been vitally connected, but are now quite set off from each other. It is one living and inseparable organism that we contemplate, every part of which is alive with the same kind of life; all the members of which support each other in a great complexity of relations and which find their ultimate meaning in the one unit of being, the human ego.

CHAPTER V

THE OMNIPOTENCE OF GOD

OUR next inquiry must be, What does evolution testify as to the characteristics of the supreme, indwelling intelligence which it discloses? To answer this truthfully we must try to divest ourselves of all assumptions derived from other sources. Our method forbids our starting off in the high-handed, edict-pronouncing way of the old theology. We cannot assume, once for all, that the Supreme Being is omnipotent, omniscient, omnipresent. Nor, on the other hand, can we affirm the opposite. What the absolute truth with regard to these attributes may be we can never know, simply because *we* are not omnipotent, omniscient, and omnipresent. What we aim at doing is to study His works in the realm made known to human experience and, in so far as we can organize the knowledge so acquired, draw inferences from it.

Not to cut loose from a priori assumptions would be like starting on a voyage without weighing anchor, and to those who regard lying at anchor as the chief function of theology, our

proceeding will seem hazardous. But let us have patience and not judge this matter too hastily. The formal statement of more than one principle on which we daily act would shock us and, perhaps, call forth a protest. The shock is occasioned by the traversing of a conventional mode of expressing ourselves. To be asked to entertain, even hypothetically, the thought of deity without omnipotence will occasion just such a shock to some minds; but this is largely a matter of language, and in what follows I shall try to make clear that there never was a more mistaken idea than that which makes the doctrine of the omnipotence of God a vital part of our religion. We have in reality never held it in any other than an obstructive sense. It has been like a dumb idol to which we have formally bent the knee and then gone on our way leading our religious lives, and justifying our belief in God's goodness, by the light of conceptions that are the practical denial of omnipotence. But our present concern is not with the old theology.

What does evolution teach us with regard to the omnipotence of God? There are two quite distinct ways of approaching the problem. We may interrogate the great process as a whole, or we may occupy ourselves with the study of details. Let us glance first at one and then at the other.

When we contemplate the overarching principles and motives of evolution we experience a sense of boundlessness that suggests infinity.

We find ourselves in a universe filled with God. We see Him at every point in the process of the ages, working within it, sustaining, controlling, vitalizing all its elements, quickening and expanding it with an ever-renewed initiative as it is made to bring forth higher and still higher products. In the contemplation of organic life there passes before us a grand pageant of creation extending through endless forms, from the single protoplasmic cell to the greatest and wisest of human kind. It is a sublime continuity of becoming, of training, of revelation, of creation, of salvation of the highest inherent possibilities of the process.

This view of evolution, which is not only a legitimate one but also the truest, in that it is the most comprehensive, gives us a God Whom we can worship, Whose power and wisdom is set before us as inexpressibly great, and as one Who can be trusted to carry to a successful issue that which He has undertaken. We may exhaust all the superlatives of language in addressing Him if we employ them only as the expression of exalted feeling.

But there is another side to it. The moment we descend from the survey of the great features of the process to the study of detail we are confronted by aspects of deity that are altogether foreign to our traditional conceptions of God. Here He discloses Himself as one Who has employed, for the accomplishment of His ends, a long

and elaborate process. His work gives the impression of one Who moves slowly, tentatively, as it were feeling His way, to some dimly foreseen end by the use of instrumentalities not thoroughly mastered; the process is apparently characterized by many setbacks, by unfulfilled promises, roads that seem to have been built a certain way and abandoned. Although, viewed as a whole, the process is seen to be a grand and ever-expanding movement upward on the scale of being, there is also an immense amount of destruction and incidental waste; there is much conflict and much suffering on the part of creatures so constituted as to be capable of great happiness. In short, the God of evolution appears to be one Who, like ourselves, is beset with limitations over which He triumphs by the use of infinitely varied appliances and adjustments.

To treat these first judgments as the adequate expression of the truth would, of course, be preposterous. In any complicated system of things the power manifested at any given point, or at a great number of points, by a controlling agent is no index of the amount of power available. Every factor in such a system limits all the others. To estimate the amount of ability behind it we must know not only what the ultimate purpose of the system is, but also all the subsidiary interests involved. To avoid being swamped by details it is necessary that we hold fast to the thought of the system as a whole.

But, on the other hand, the implications that we have been considering have their significance, and it is one that profoundly affects the issues of constructive thought. For one thing, it is the endorsement, on a large scale, of the analogical method of seeking truth. In evolution He Whom we call the Almighty has revealed Himself throughout nature as a being Whom we can progressively interpret by the study of our own methods and experiences. Evolution invites us, nay, commands us, to come and learn from it, as from an open book, of the God Whom we have been taught to regard as incomprehensible. The idea of infinity has kept us at a distance from Him, has held us in leash, as it were, from studying Him as He is revealed in nature and throughout the whole realm of our human experience.

It has told us nothing whatever about Him, but only what He is not. It has been a great and all-comprehensive denial of the community of our nature and His, a destructive blight upon the natural growth of our minds toward Him. We are finite, He is *in*finite. Our thought, limited in every direction, is necessarily the antithesis of His unlimited, all-comprehensive thought. His emotions, if He has any, are the emotions of one Who is an absolute stranger to all opposition, Who has never known the tug or the joy of overcoming, Who has never experienced the enthusiasm of pursuit, the long-drawn-out pleasure of gradual approach through difficulties to the

attainment of an object or condition earnestly desired. He has never, and never can, experience the delight of the onrush of a new thought or the dawning and growth of a new faculty. In a word we have, in our short-sightedness, while thinking to honour Him with high-sounding titles, only crowned Him with emptiness and vacuity. While declaring Him unlimited we have, from the standpoint of our knowledge, made Him the absolutely limited one. For, so far as His infinity is concerned, He is to us a meaningless blank.

It is indeed true that the same theology that erected these barriers of thought has also admitted the frank and wholesome anthropomorphism of the old Hebrew religion, which has come down to us emphasized by the cult of Christianity. These two have lived along together, with the result that the worship of the God-man has almost entirely overshadowed that of God the Father, the creator of the world, and the God of nature. Necessarily, for He of the infinite attributes furnished no food to satisfy the religious cravings of his would-be worshippers. We have been able to live under this mixed regime, but only a cramped and stunted intellectual growth was possible. From the one and only outlet for the human mind in constructive thought, the gateway of analogy, we were logically debarred. Whenever we have set ourselves down hoping to figure out on our little slates the problems set for us by the great educator, theology with its

wet sponge of infinity has obliterated all our work and left us staring at vacuity.

It is just the reverse with evolution. Here we find ourselves in an atmosphere of encouragement. Our analogical efforts are approved. At every stage of the work we receive new and helpful suggestions for its continuance. Our problems, it is true, are ever expanding before us with innumerable outlooks. We shall never get to the end of them, but we feel increasingly that we are on the right track.

Is it the problem of God's power in creation? We are intimately acquainted with ourselves as creators, as bringing into existence a little world by the use of instrumentalities. By these instrumentalities we are, at the same time, aided and limited. We are absolutely dependent upon them, we can do nothing without them; they, in one sense, control us. At the same time we make them forward our plans, bend them to our purposes, lead them into special channels, overrule them in the interests of the individual and of society. So doing, we accomplish great things, but these great things are characterized by great imperfections. The responsibility for some of these imperfections rests upon us, but for a very much larger class it is justly laid upon the *nature of things*. We are limited not only by our very imperfect knowledge of the possibilities of things, we are limited also by those possibilities themselves. And when we look at the world of man's

achievement, with its wonderful extent and variety, our amazement is called forth not because he has accomplished so little, but, on the contrary, because, with all his limitations and in spite of the seeming rigidity and obduracy of the materials with which he has had to work, he has accomplished so much and gives promise of accomplishing so much more.

Just so, from the standpoint of this analogy, our minds should be filled with amazement because of what the world is and what it promises to be, rather than with criticism because it falls short of some ideal condition of things that we should like to substitute for it. If we once admit the thought that He who created the world, as we know it, laboured under limitations of some kind analogous to those which we have to meet and triumph over, we are ready to worship rather than to find fault. Remembering our own tribulations and triumphs, our hearts go out in sympathy and thankfulness for what has been hitherto and for that which shall be.

Shorn of the word *omnipotence*, the idea of God becomes something less awe-inspiring, perhaps, less mysterious, less removed from us and all our possibilities, but, on the other hand, it becomes something more real, more *intelligibly* worshipful, infinitely more moral and love-inspiring. He appears as one Who shares the battle with us, Who counts on us as supporters in the world-process. Omnipotence divided Him, as by an

unfathomable gulf, from us. We worshipped we knew not what, a being of inconceivable attributes. The God of evolution is, on the contrary, one Whom we can measurably understand, one with Whom we can live in sympathy. He is one to love and to work for. Our devotion to Him is not a mere fleeting incense, it is a positive factor in a world-not-yet-finished, in a process which may be advanced, or hindered, by the way in which we lead our lives. What we should most earnestly desire is not the absolute confidence of a foregone conclusion, but an unconquerable faith, a faith that is synonymous with devotion, courage, loyalty.

The writer is not forgetful of the other side of this view of things, and that there are those who are so constituted, temperamentally, that they will be able to see in the erasure of the word *omnipotent* nothing short of the annihilation of our belief in a God of supreme power and majesty. It is so easy for some of us to plunge from one extreme to another that the only alternative to the imputation of this impossible attribute is to think of God as one Who is in all respects limited and fallible. But, as matter of fact, all that evolution does, as regards this divine characteristic, is to take that which has always been our working belief under its transforming influence and give it back to us purged of its negativeness and re-enforced with the vitality of a positive proposition.

I say our working belief; for always, as related to the other doctrines of our faith, we have employed a conception of God that involves limitation. We could not do otherwise; for it was impossible to eliminate the idea of a conditioned being without at the same time eliminating the idea of personality. And with the belief in personality gone, the bottom drops out of our constructive thought. Our inherited theology had a semblance of coherence only because, in violation of its assumptions with regard to infinity, it admitted personality. And those who see in the frank admission of the issue which evolution forces upon us the annihilation of our belief in a God of power and inexpressible majesty may comfort themselves with the reflection that this ennobling belief has somehow managed to live through the ages linked with the belief in His limitation.

The great and central doctrine of the Atonement most distinctly represents the Almighty as inexorably hedged in by a necessity, in the nature of things, involving a sacrifice at which, in Milton's words, "all heaven stood aghast." And in the same connection, God the Father is represented as explaining Himself to the angels with regard to the status of fallible man by adducing the limitations that obliged Him to create this being, made in His own image, with just the amount of freedom and weakness that resulted in his fall.

More emphatically still does our traditional theology display this inconsistency in its account of the entrance of moral evil into the world. The Creator planned, called into existence, and launched on its course what He pronounced to be a perfect world. But somehow there were flaws in this plan that escaped His omniscience, and so there came to pass a great breakdown in its working. It failed utterly just in that part on which he had set His heart. According to our theology, man was created a perfect being; he was the head of creation; he walked with God and was loved and approved by Him. But lo! a great catastrophe. Sin entered, and all the fair promise of his incipient career was blighted. With his failure everything else went wrong. The very ground was cursed for his sake, and the harmony that characterized the original scheme of things became discord.

In this narrative, the multitude of failures apparent in evolution are gathered into one. But does this help matters? From the rational point of view by which we are testing the new revelation, the one great breakdown, the terrible centre-shaking catastrophe, for the most part irretrievable, presents an incalculably greater obstacle to faith in the ability of the Creator to carry out His plans than the innumerable instances of *seeming* failure that appear all along the course of the great process. These, by comparison, are things of minor significance and not difficult to

deal with; for they are each one embedded in a vast system of things, a system which we now recognize as a process of the ages, of which we can see but a little part, but enough to be certain that it is no mere play of blind forces. It is a continued progress, in which we can see apparent mistakes eliminated, apparent failures redeemed by success in other directions, in which destruction is often shown to be the removal of hindrances, and in which the circuitous course leads to the goal. There is no permanent setback in its whole history. There is no discovery of a break in the plan, no change of policy. It is, as a whole, one grand continuity of becoming, one long, consistent story of successive triumphs pointing still onward to we know not what great consummations.

Again, our inherited theology recognized the idea of a rebellious element, adopted perhaps from the Persian religion, with which the Hebrew was, at one time, in such close contact. God, though omnipotent, tolerated for some reason the Devil and his angels, and they held a conspicuous and often tragically real place in the thought and lives of our not-remote ancestors. This was a relief to those who did not look beyond the surface of the problem of evil. But for those who did, it was the opposite of reassuring; for the doctrine of omnipotence fastened the responsibility for the unchecked activity of the Devil and his angels on the one God Whom they, at the same

time, wished to worship as a God of love. In other words, the idea of God as limited was implicit in the idea of God as benevolent, as well as in the idea of God as a person. And practically we have always thought of the divine agency as characterized by an associated freedom and determinism similar to that which we find in human agency.

Before leaving this part of the subject I will venture to call attention to the finality with which our deductions from evolution drive into outer darkness two bogies that have tyrannized over constructive thinking. One of these is known as "the relativity of human thought," the other as "anthropomorphism." Not that there have been lacking minds sufficiently sturdy to set them at naught, but that they have been used, now and again, with great success in turning the average thinker away from the legitimate avenues of progressive knowledge and into the barren by-ways of scepticism.

It is, perhaps, hardly necessary to say that I am not questioning the fact of the relativity of human thought. Kant's position that man can know, directly, no more of the nature of things than his own mode of perceiving them, which is peculiar to himself, is not only sound, but one which is illustrated to us every day of our lives, both in our intercourse with other human beings and in our relations to the animals farther removed from us by differences of organization. But, on

the other hand, it is equally true, and a matter of far more vital interest to us, that our mode of perceiving things, peculiar as it is to each one of us, is, analogically, a trustworthy guide to the interpretation of minds differing in important respects from ours. The farther removed any two persons are, by birth, training, or temperament, the more likely they are to make mistakes in their efforts to comprehend each other, but in virtue of their common humanity they are able to arrive at a fairly reliable understanding. It is the same in our relations to the lower animals.

These considerations are, on general principles, a sufficient answer to the assumption of sceptical thinkers that we are for ever debarred from any knowledge of a being who transcends our immediate experience, because of the relativity of our human thought.

Even before the facts of evolution were made known we were in a position to say that there *probably* exists in the world a being possessed of an intelligence and a creative power far exceeding ours, and furthermore, that this being probably works, as we are obliged to work, under limitations of some sort. This was a legitimate and justifiable hypothesis, depending for its verification upon its practical working in our lives, and awaiting endorsement or the reverse, in the testimony of our subsequent experience. With evolution that endorsement has come. Our hypothetical construction has been justified. What

we prophesied ought, in conformity to known principles, to be discovered, has been discovered. Some of the methods by which our postulated Supreme Being works have been disclosed, and they are, on a vast scale, the corroboration of our analogically formed hypothesis.

The obstructive claims of the relativity of human thought, therefore, have received a refutation not of words, but of facts. The question as to our ability to transcend experience is no longer a living issue. We have transcended it. And let it be observed that evolution has thus become, not only an emphatic endorsement of our postulated Creator, but an endorsement of the method of analogy as a whole.

The same considerations apply to the word *anthropomorphism*. It has been a byword and a hissing, a name to conjure with, not because there is anything ridiculous about the attempt to conceive the personality of the God Who is in touch with us, by the use of humanly derived analogies, but solely, because we have tried to do this while insisting upon the infinite attributes of the same God. The cherishing of these time-honoured claims invalidated our right to the use of analogy and at the same time made us the prey of our opponents. Our teachers and our preachers, the representatives of a God of infinity, have, unwarrantably, taken the liberty to apply the analogies of our experience to the explication of the God Who works in the world of nature.

They could not do otherwise if they identified Him with the God of the Hebrew religion, or if they made Him in any way intelligible.

But, judged by the assumptions of their theology, they were trespassing; they had no rights in this analogical realm. And there were those who were not slow to raise the hue and cry against them. The illegitimacy of their proceeding was flagrant. A God infinite in all His attributes, the antithesis of man in every essential, and yet one Who was to be apprehended through analogies derived from this same finite man! The scientific and logical inadmissibility of such a conjunction of ideas was easily made to appear. They were told that their reasoning was puerile and preposterous, they were accused of that most dreadful thing, *anthropomorphism*. Nor was it possible to shake off their tormentors without either surrendering the most vital thing in their constructions, that is, analogically derived conceptions, or, on the other hand, their old cherished metaphysical idols.

Let them adopt the latter course and the vigour of a new life characterizes their mental processes; not that alone which is born of consistency, the straightening out of an old thought that has been sorely tangled, but, in addition, the quickening of every pulse of thought by the incoming of the new vision, the enlargement and liberty that accompanies the far-away view where,

hitherto, all has been enveloped in the fogs of abstract ideas.

Since God is known to be one Who works by methods that may be likened to ours, every experience of ours, every problem solved, every difficulty against which we contend throws some light upon the meaning of the way which He takes. His problems are our problems. His good is our good. His evil is our evil. He is engaged in overcoming as we are engaged in overcoming. We are *one* with Him, not simply in a mystical or metaphysical sense, but really and practically, in that His interests are our interests. The realization of the highest possibilities of our individual lives is, so far forth, the realization of the great world-process. We are involved in it, a part of it. To each one of us is intrusted a definite work to accomplish in the onward march of the world's becoming. Hence all our progressive knowledge of nature and of human nature, all that we discover as to what is possible, desirable, expedient, or necessary in our social relations, contributes indirectly to our knowledge of God and becomes valuable material for our theological constructions.

Without misgivings as to the legitimacy of our procedure we can advance in the full and joyful courage of our convictions. The order of nature bids us go on. The continuity of the method that has characterized the world-process hitherto, assures us that we are on the right track and walking in the light when we try to trace

God's purposes and ways as the reflection of our own dearly bought experience. If we are faithful in our adherence to this method, whole realms of reality will become subject to our thought that have hitherto been the wild haunts of untamable problems.

CHAPTER VI

EVOLUTION AND THE DOCTRINE OF GOD'S BENEVOLENCE

WE have seen that if, in obedience to the facts of evolution, we surrender the time-honoured assumptions of theology with regard to the infinite attributes of God, our losses are offset by a gain of inestimable value; namely, the setting of our intellectual house in order and the emancipation of our reasoning faculties.

I

When now we go on to ask of evolution what it has to teach us with regard to the doctrine of God's benevolence, it will be manifest that we have only begun to recognize the value of the freedom that has been secured to us by the dismissal of these abstractions. So long as we remained subject to them we were harnessed to an absolutely unworkable doctrine of the benevolence of God. The problem of evil, as it is called, owes its gravity almost wholly to the assertion of God's omnipotence. It is the fulcrum of the argumentative lever that, from a rational point

of view, has proved irresistible against any and every attempt to formulate a defence of the doctrine that lies at the heart of our religion. We have not only made no progress toward the solution of this problem of evil, but, in these later days, the situation has been aggravated by the light which evolution has thrown upon the methods through which the world has come to be what it is.

We have, it is true, tried to formulate tentative explanations of the dreadful happenings of the world. When some great misfortune has befallen us, or our friends, or the community in which we live, when the long-drawn-out tragedies of wasting illness, of droughts and floods, of famine and forest fires have appalled us, when an earthquake has laid a great city in ruins, killing and maiming thousands of men, women, and children and entailing wretchedness upon thousands more who have lost their all, we have tried, perhaps, to meet the situation manfully. We have summoned visions of the other side of the picture, making this and that hypothesis to explain why for our good, or for that of the world, it might be a moral necessity that we and it should be subjected to such tragedies. Or, we have said, it is all the outcome of the order of nature, an order that had to be and that produces much more good than evil in the world. But, however cogent our reasonings may have been, they have, anon, dashed themselves into spray against the infinite attributes of

God that have suddenly loomed before us. Is not the Omnipotent One also the author of nature? Did He not foresee these and all the other horrible things that would necessarily flow from it? And why did He not, if omnipotent, establish an order free from such dreadfulness?

Only two answers are possible, one of which is no answer, but a rebuke. It may be said this is God's secret, we cannot understand it, it is rebellion to try to understand it. Or, on the other hand, we may entertain the hypothesis that the omnipotence of God is not *quite* so absolute as we have imagined it to be. There may be, we hesitatingly admit, limitations in the nature of things which oblige the Supreme Intelligence and Will of the world not, as some would put it, to do evil that good might come, but to choose the least of two evils: on the one hand, a world without life, or, on the other, a world with life and incidental evil. This, as we have seen, is also the conclusion forced upon us by God's revelation of His methods in evolution, and no sooner do we let go our hold on our inherited predispositions and embrace frankly the implications of nature than the spell is broken.

A ray of light penetrates the darkness of our theological cave and, if we follow it up, it will bring us out into daylight. This one little *perhaps* is enough to begin with. It makes all the difference between no light at all and the knowledge that there exists a realm of light and that we,

moreover, know the direction in which it lies. Furnished with this, all our constructive powers are quickened. We have a well-defined goal of religious thought to strive for, an occupation for every one of our highest faculties, and the means for the prosecution of our work flow in upon us the moment we concentrate our attention on its achievement. All our discarded arguments for the possible benevolence of God reformulate themselves and take on the hue of health and vigour. We have every reason now to foster and encourage them. We feel instinctively that the life pulsating in them is but the feeble outlying manifestation of a larger, fuller knowledge that may be ours. A host of considerations rally to our assistance.

Having set up the hypothesis that there is some inherent opposition in the nature of things that has to be overcome in the interests of the best possible world, and believing that it is legitimate to assume that the conditions which limit the Supreme Intelligence are, in some measure, similar to those which we have to encounter, we have an inspiring work cut out for us. And the first effect of this change of attitude is to turn the criticism that we have been directing against the Creator upon ourselves.

What has been the ground of that criticism? We can have no ground whatever for fault-finding unless we have thought out some better plan for conducting the world than the one which

we find in operation. We know much about the nature of things and the antagonistic behaviour of the forces with which we have had to deal, and we remind ourselves of the unwearied patience and persistence against repeated failures that have characterized the achievements of our race; and looking back over its career, we apply tentatively the analogies of this human experience to the explication of the methods of evolution. What do we find?

Can we, from what we have learned of the nature of things, point out how animated nature could have been constructed so as to have secured all the good results embodied in it without the stimulations and restraints that each creature finds in its environment?

All the exuberant life and joyfulness of the animated world have come into being not in *spite* of the adverse influences and obstacles that every species has to encounter, but directly *because* of those conditions. The difficulty of finding food, the alertness and activity that are required every day in the avoidance or thwarting of hostile influences, the battles that have to be fought, and the sharpening of its wits in consequence — all these are the very cause and source of the exuberant happiness that characterizes nature through its length and breadth.

There is also, it is true, defeat and suffering; forfeits have to be paid all along the course. But death comes to all soon or late, and would it be

an improvement that every creature should be able to live out its life to the bitter end, dying by inches of old age and nothing to do, rather than by a short stroke when life is at its full tide? The evolution that we know has a very beneficent side to it. It has everywhere provided for the emergence of those conscious states that are the source of joy in all living things: the sense of movement, of progress, the sense of achievement, the sense of triumph over difficulties, the joy of love in the time of mating, of nest-building, of producing and rearing and defending progeny. Why should we doubt that every animal feels a joy in the unfolding of its faculties, akin to that which we feel in our more self-conscious realizations of growing personality.

From the earliest stages of organic life onward the dynamic of progress seems inseparably bound up with the struggle for existence. Effort on the part of the creature supplies the occasion for the expansion of the organism and the increase of faculty. It is impossible for us to imagine how the higher values of life could have been reached otherwise.

Again, it is inconceivable that there could have existed any organized creation, good or bad, without that uniformity which we call the fixed order of nature. In its absence we can think only of chaos. And yet this uniformity is seen to be a principle not of unmixed good, but one involving at times much incidental evil. How many neces-

sities of this kind there may be, or how far-reaching they are we cannot know. But, an increasing knowledge of them is sure to be ours if we are on the watch to discern them. The discovery of evolution has revealed to us the interdependence of the whole scheme of things as we never knew it before, and it has illustrated this with a wealth and variety of facts that should immensely broaden our estimate of the multiplicity and the complexity of the ends that must be taken into account if we try to explain its meaning.

We have, as it were, broken into the laboratory of the Great Artificer and made ourselves free to investigate His hitherto secret methods. But, in the presence of these wonders, it behoves us to conduct ourselves with a good degree of modesty, to remember that it is not by the incompleteness that appears in the workshop, not by the multitude of things we find there, of which we cannot discern the use, that the process or its Author is to be judged. Unless we assume that we have the same grasp of the situation that He has, and feel that we are able to give Him points as to a shorter and better way of doing things, it is at least foolish for us to draw hasty inferences about His ability from these fragments of His work.

We can never hope to get more than glimpses on this side and on that of the maze of subsidiary ends that He contemplates in their entirety, but those glimpses may be moral tonics of great value.

Innumerable instances might be adduced; I will mention only one.

In that familiar and classic expression of distress that occurs in the fifty-fourth canto of "In Memoriam," the poet dwells with painful interest on the mysterious fact that nature, after maturing fifty seeds, often brings but one to bear, and the dreadfulness of this and other enigmas provokes that cry of a wounded faith:

> I falter where I firmly trod,
> And, falling with my weight of cares
> Upon the great world's altar stairs
> That slope through darkness up to God,
>
> I stretch lame hands of faith, and grope,
> And gather dust and chaff, and call
> To what I feel is Lord of all,
> And faintly trust the larger hope.

But, if for a moment we call to mind the fact that one of the greatest industries of the world is the production of thousands upon thousands of seeds, for man's food, for every single seed that is used for reproduction, does it not seem needless for us to blacken our souls and begin to lose our faith in God because we find that of fifty seeds He often brings but one to bear? When we reflect upon the variety of the tribes that God has called into the world for His own pleasure and for theirs, and of the never-ending necessities of that world, ought we not to be consoled for the forty-nine seeds that fail to germinate? Some

of them have gone to enhance the happiness of the bird that, soaring heavenwards, pours out its little soul in songs of thankfulness.

I am not, be it understood, criticizing the above quotation as an emotional view of the world. But every emotional view is necessarily one-sided and can be regarded as an expression of truth only when rectified by the emotional view appropriate to the contemplation of the other side.

In all our fault-finding with the methods of nature let us lay to heart the fact that some of the worst evils to which the pessimist can point are the results of man's attempts to improve that very order of evolution which he criticizes. In our efforts to relieve the unfortunate we are often dismayed to find that we have pauperized them and that their number increases in a bewildering ratio. In our efforts to educate them we often unfit them for the stations they would naturally fill, the work they are capable of doing, without successfully adapting them to anything else. We take them away from the environment which they understand, and leading, sometimes driving, them into a strange land, abandon them there. It perhaps seems to us that we have given them a better heritage, but in many cases they are wholly unable to adapt themselves to it.

I believe it is no exaggeration to say that the great problem of our modern civilization is not to persuade men to devote themselves largely to living for others, but rather to discover ways of doing

this which will not aggravate the evils that we deplore. I am not questioning the legitimacy or the urgency or, in the long run, the usefulness of human effort in this direction. We are intelligent factors in the world-process and great responsibilities are ours. The Supreme Wisdom that works in all things has taken human agency into His service and laid great tasks upon it.

What I wish to point out is this: there is no royal road to the elevation of mankind. Our theories of the way to effect it are easily woven, and our Utopias, as we dream them, look as easy of attainment as they are delightful to anticipate. But somehow the roads that, on the chart of our dream, looked so well constructed on a substratum of assumed human goodness, have proved impracticable. And after trying our hand at society-building, we have had to come back, humbled in spirit, to learn of nature. We have had our eyes opened to the fact that the problem is a vastly bigger one than we had thought, and that the Divinity that shapes our ends draws His wisdom from depths that we have not fathomed.

II

But, this method of studying our subject gives little more than a preliminary glance at it. We have been bestowing our attention on details and on methods of working; it remains to examine the movement as to its fruits. If evolution were simply a succession of states, or organisms, pro-

ceeding one from another by differentiation, without progress or definite direction toward an apparent end, we should have to be satisfied with comments like the above. But we are not thus limited.

Since evolution *is* a progressive continuity, a unified process of ever-increasing complexity, it will easily be seen that we approach the problem of God's benevolence under far more advantageous conditions than those in which the theologians of an elder day found themselves. We are permitted to concentrate attention upon one main issue; namely, the tendencies, results, and implications of the process as a whole. "By their fruits ye shall know them." Can we ascertain the end toward which evolution seems to be moving? Can we determine the nature of the highest product thus far elaborated? Can we show this to be an outcome of supreme worth and of such a nature that it points to still higher values? If we can find satisfactory answers to these questions we shall have something substantial on which to build a conception of God's character. We shall not have to be looking now on this side and now on that, balancing accounts and wavering as we divide our attention between the two.

We are sometimes told that what we here suggest is a fruitless or worse than fruitless quest, that evolution, of itself, gives us no evidence of progress toward an end of any kind, let alone one

of supreme worth. But such a judgment as this can be pertinent only to a purely outside view of the process, and if we join the hopeless ones in confining our induction to its purely external aspects, we may have to join them also in their conclusions. For, from such a point of view, evolution seems to be hardly more than a great dramatic representation, full of stirring episodes, in which human beings are, at the same time, the actors and the spectators. Now it is a scene of conflict, long-drawn-out and deadly; now it is one of peace that floweth like a river. Lofty heights of feeling and achievement are reached, vistas of entrancing possibilities are opened into an unattainable future. Triumph and despair, love and hate, trust and betrayal, expectation and disappointment, and then the dropping of the curtain, and darkness. We are told that this great process of mundane evolution cannot go on indefinitely, that it will reach a culminating point and then recede as it has advanced, slowing down as the rays from a cooling sun reach it with an ever-decreasing vitality, until the last living thing has disappeared. From chaos unto chaos, a grand pageant, nothing more.

But, thanks be to the Creator of all things, we are not doomed to stand for ever gazing at the external aspects of the world: we are permitted to enter and to have its meaning explained to us. In the self-consciousness of man we are conducted straight into the heart of things; we are admitted

to the secrets of the great world-process. Man, it is true, is but one little part of the universe. But his self-knowledge is a door by which he gains admission to its interior. And once in, there is no limit to his comprehension of problems that would, otherwise, be opaque for ever.

This unique, inside knowledge of one part of the universe becomes to us the key to the whole of it. Here all the great concepts by which man interprets the world have had their origin. Here the idea of cause, which philosophers have so vainly tried to educe from external relations, came to the birth. Only through the knowledge which man has of himself as an originator, a modifier of events, has he become possessed of that concept that lies at the foundation of all science; namely, that of a causative relation existing between the events of the external world. Here also, from the very same experiences and by the same process of inference, has sprung the conception of a great and all-powerful Creator, sustaining to the universe relations similar to those which man sustains to the creations with which he has surrounded himself.

It is here, again, that we are made acquainted with that special group of instincts which together constitute man's moral and religious nature. Gradually, from small beginnings, dawned the light of moral values, — the faculty to discern in actions a higher and a lower, a better and a worse. Here, in ever clearer outlines, appeared, on the

background of self-consciousness, the vision of a superior ideal-self contrasted with its counterpart, the vision of a degenerate self; and with the vision a command to achieve the one and to escape the other. Here arose, also, the instinct of worship, — the instinct that voiced itself so wonderfully in the ancient Hebrew liturgies, that men have continued, through all subsequent ages, to find in some of them the most satisfactory expression of the human soul. And here, again, was born that prophecy of a life beyond the grave, in which the illusory ideals of earth's mirages, shall be more than realized. With these also we must class the whole outgrowth of the æsthetic side of man; the love of all that is beautiful and inspiring, and the creative impulse that urges him to express his love in constructions of his own.

I have spoken of these instincts as a unique group that together constitute man's moral and religious nature and, thus characterizing them, have implied their organic unity. An organic unity they certainly are. They can be thought of separately, they can be treated and cultivated separately; but separately they are not that which we are seeking. All taken together, in their composite unity, they constitute the ground of the highest product of the world-process hitherto revealed. They are the nidus of the higher evolution that is to be, the vital germ, containing the potency and promise of the future.

As thus stated it is an ideal product, related to

an ideal future. But it is not therefore merely a thing of words and imaginings. It has a very real and concrete side. It is a matter of acts and experiences. In every age it has been incarnated in the lives of men and women whose feet have trod this earth, whose love and devotion have gone out to the things of this earth and, through them, to the things that are eternal. Not that we have seen or shall see all that is shadowed forth in these instincts realized in any individual. For if we affirm perfection of any human personality, it is, and always must be, a relative perfection; relative, that is, to the age and society in which that personality is developed. It is equivalent to saying that the principles, the elements, that lead to perfection are in this one fully represented, that we find here loyalty to all that is highest in the human soul. The highest realized product is the highest because, while declaring its own incompleteness, it points to a further development of values.

Now for a deduction. To put it in the simplest way: Is it not a fair inference that the Creator's character is expressed to us in those qualities that He has made us, the most highly developed of His creatures, to recognize as the highest? When we say with the Psalmist, "O come, let us worship and fall down and kneel before the Lord our Maker," is it the call to an act of adoration simply on the ground that God is the author of our being? Is it not rather because morally, religiously,

æsthetically, He has made us such as we are, beings so constituted that our reverence and love spring up spontaneously toward certain qualities? because we see in Him the reflection and source of whatsoever things are pure, lovely, morally and physically beautiful? because we trace back to Him, as their author, all such qualities as justice, mercy, truth, and love? because He has made us creatures of hope and aspiration, has given us life, and with it the potentiality of realizing, progressively, all that life prophesies?

But, it may be asked, are not those other instincts also from Him — those that often antagonize the uplifting ones? Has He not planted the germs of passion and of virtue side by side? And while He has made justice and mercy, loyalty and unselfish love adorable, has He not also made them most difficult, permitting their opposites so to root themselves in our nature and so dominate us with their insistence that our vital energy is often given to them even while our respect and reverence go out toward their rivals? The good we approve, that we do not; the evil we would not, that we do. Truly, and herein is revealed in its clearest light the face of the Author of our being. It declares most unmistakably what He approves and what He reprobates. Each aspect of the truth emphasizes the other. We could see neither clearly without its opposite.

But, more than this, it is just this moral antagonism, this war in our members, that sup-

plies the indispensable condition of actual morality. It is from this that the very knowledge of good and evil springs. It is in this that all moral strength is generated and all virtue of whatsoever description. The instincts that start us on the way toward the love of God, though organically connected with the highest fruits of evolution, are not themselves those fruits. They constitute the root-system of the tree of life. Character begins in them and, all along its course, is fostered by them. But it is only through the antagonisms of good and evil in the moral consciousness of man that character becomes actual. Without the presence of these two principles of moral light and darkness, men might be morally sentient, but never morally intelligent, or morally efficient, beings. Through their conflicting agency morality emerges from the realm of feeling into that of energizing, overcoming, creating.

Only so, has sprung into being that race of moral heroes, that cloud of witnesses in whom we have, speaking *reverently*, God objectified. God *with* us, testifying to the God that is *in* us. I say speaking reverently; for in our inherited religion we have been familiarized with the thought of one supreme and only incarnation of the Great Being Whom we worship. But why should the recognition of this supreme example blind us to the fact that human history is full of partial incarnations that have, in different ways, contrib-

uted to the formation of the highest ideal which we worship as God? From age to age the process has continued, a perennial and ever-advancing revelation of God in the moral perceptions and inspired utterances of good men, and objectified in their lives. This has been and is the law of all moral evolution. All the greatness, all the virtue, everything in human character that elevates and inspires the soul has entered and established itself in human consciousness by this method. First the progressive illumination within, then the progressively realized and substantiated achievement wrought out in actual life.

To thus extend the scope of the principle of incarnation can detract in no way from the significance of its supreme example. On the contrary, by removing that highest example from the isolation of a unique, anomalous phenomenon we intensify its meaning and make its acceptance, as an article of belief, not the deadlift of faith in a mystery, but a normal deduction from a well-defined law of nature. It appears as the continuance of God's method of working in His world. We cannot be said to have assimilated any fact of experience, or of history, until we have found its place in the hitherto observed order of the world. To discover this is its interpretation, its introduction and matriculation into the body of belief by which we live.

To come back to our argument: assuming that we have determined, in outline, the highest prod-

uct of current evolution, and furthermore that we have found it to be an outcome of supreme worth pointing to the realization of still higher values, we may now advance our hypothesis to a higher position. From the status of a weak herbaceous plant it has developed woody fibre and a good degree of stiffness to resist assault. Its roots have found a strong hold in the soil of human experience and it gives promise of a vigorous growth. But it is not unassailable, and it is worth our while to forestall some of the forms of contradiction which, if well grounded, would cause it to wither like Jonah's gourd. It is hardly to be expected that we should try to enumerate and answer all the ways in which our hypothesis may be criticized. But there are two which, as living issues, demand our attention.

III

I am assuming the following propositions to be true. First, *Evolution is an all-comprehensive process.* It is not simply a method by which *some* things have been brought to pass. All things have come by it and through it. Second, *The fact that man has had an important share in the achievement of his present moral status does not obliterate the fact that it is also the work of the God of evolution.*

If the first of these propositions is not true, it is clear that our argument for the goodness of God derived from the moral nature of man as the highest product of evolution is not conclusive.

If, when any part of our experience seems to be at odds with the methods of the great process it may be ruled out as alien to it, the whole case is prejudged. This is just the attitude taken, in our day, by a school of thought that represents much intellect and cultivation. The methods of evolution, it is affirmed, are throughout immoral; therefore the moral nature of man cannot be its product. To substantiate this position the unlovely characteristics of the great process, up to the advent of morally enlightened man, are drawn for us with the most uncompromising exclusiveness, leading to the dilemma of moral indifference on the one hand, if a presiding intelligence is postulated, or, on the other, to blind forces without purpose, or consciousness.

In contrast to this picture, man is set before us as the beginning and the source of all morality, of all nobility, of everything that elevates and inspires the soul. He, a being of unknown and untraceable origin, is the only thing of worth, or dignity, in the world. He has given birth to that ideal of a perfect type of being that should dominate the hearts and imaginations of the race. He is the supreme reality, the all in all, the final end of our strivings, the highest object of our worship. To infer, from what man is, the existence of a being of higher intelligence, say the Positivists, is not simply illegitimate, it is most harmful, in that it withdraws from the cult of Humanity the zeal and enthusiasm that should be its motive power,

But we cannot play fast and loose with the principle of evolution, availing ourselves of it here and excluding it there. To do this would be to discredit it altogether. In short, the assumption of a something independent of the great process, not concerned in it, takes issue with all the evidence that goes to support it. But, lest this should seem a too summary way of dismissing the subject, let us try to look at the matter from the positivist point of view, and argue it solely on the ground of appearances.

I will ask the reader to pass in review any one of the processes which, within the sphere of his experience, have led to the most finished works of human creative ability. Here, for instance, is a human abode, perfect in its adaptations to the wants of the most highly developed man. Everything about it and its surroundings expresses harmony, fitness, restfulness. Art and nature have met together, usefulness and beauty have kissed each other. In such an abode every desire is at once met by appliances that have anticipated it. Whichever way the eye turns, it is greeted by some new delight.

Now let us send our imaginations back, not only along the course of the construction of this one abode, but along the many and devious tracks by which various co-operating arts and sciences have toiled and felt their way toward this consummation. What crudity, what abortiveness, what failures, what unloveliness of

laboratory and workshop, what dirt and daubiness and noisome exhalations, what hope delayed and heart-breaks on the part of the human factors that have, from first to last, contributed to the result! What resemblance is there between all this incompleteness and turmoil and the harmony of the outcome? And if we fix our attention on all the unlovely aspects of the antecedent process, its hardships, its disappointments, its apparently fruitless sacrifices, quite putting out of mind the fact that it has had also its triumphs, its exultations, its satisfied enthusiasms, how easy to see the process as the opposite of that which it has produced!

I am loath to suggest the absurdity of a sage so transcendently wise as to propound the theory that the manifest incongruity of these two, the process and the outcome, render quite impossible the belief that the latter has proceeded from the former. And yet the hardihood of a philosopher who, in the light of the new revelation of an all-embracing world-process, can hope to prove the higher nature of man to be outside and alien to it, seems to the writer to be quite equal to such an absurdity. The word *prove* is used designedly, for the burden of proof surely lies with those who postulate such a departure from the principle of nature's uniformity. The only semblance of proof possible in this case is the alleged incongruity between the process and the product. But it is the business of science and of philosophy to dis-

cover the underlying continuity that such apparent contradictions hide from us. Only by the reconciliation of facts seemingly irreconcilable, only by patiently disentangling that which at first presents itself as hopelessly involved, by discovering relations between things held to be absolutely unrelated, has science achieved that unification and organization of our knowledge that we call a scientific creed.

Positivism with all that calls itself Agnosticism, as related to our higher beliefs, while posing as the advanced outcome of modern thought is, in fact, essentially archaic. Its spirit is the opposite of the scientific. It is impatient, assertive, dogmatic. It declares questions closed on the ground of its emotions. It sets aside the law of continuity as brusquely and confidently as any doctor of theology with the authority of the Church behind him.

But it is not at all with the *affirmations* of positivism that we have a controversy. It is not its positivism but its negativism that blocks the way. So far as its exaltation of man is concerned, it is building upon reality. After God, man's nature is indeed the greatest reality of our experience. Taken in connection with its outlooks, its far-reaching prophecies, it is a reality of such importance that no exaggeration of it is to be feared. But when men address themselves to the task of defining its limitations from the standpoint of what it has been hitherto, then it is that dark-

ness closes in. And when men are so enamoured of that which they know, that they feel competent to set bounds to all further knowledge, we can but recognize a phenomenon with which evolution has made us familiar; that is, arrested development. Modern thought has here, so to speak, pocketed itself.

That which a pragmatic theology must always fight against, as true science does, is the tendency to foreclose the situation, to raise the cry, "Thus far and no farther." It is a significant fact that the so-called religion of positivism and that form of church religion that takes its stand on "the faith once delivered to the saints" are one in spirit, although the positions to which they irrevocably commit themselves are as wide apart as the poles.

I have hitherto, for argument's sake, tacitly accepted the charge of manifest incongruity between the moral nature of man and the antecedent course of evolution. But for argument's sake only. I take issue radically with that position, and that, not alone because of faith in nature's continuity as a general principle, but also on the strength of facts which are already in our possession. Looking back over the way by which we have come, a goodly array of analogies show us an unmistakable track of continuity, the well-defined beginnings of that which has flowered forth in the higher nature of man. To develop more fully this relatedness, to demonstrate the unity of

purpose and of method that makes a straight story of it all, and to gather therefrom a far steadier and clearer outlook into the probable future of man's evolution, is one of the great tasks of the inductive theology of the days that are before us.

IV

The second proposition instanced as having a vital bearing on our argument is one of very wide outlooks and can be touched upon only briefly in this connection. It was as follows: *The fact that man has had a share in the achievement of his present moral status does not debar us from tracing its origin to God.* Every product of evolution, in so far as it is shaped by mind, is the result of a co-operative activity, the joint work of the Creator and the creature. Much depends on the faithfulness and the efficiency of the latter, but the initial impulse at every upward step of the process and the overruling guidance that shapes our ends can be found nowhere but in the Supreme Intelligence. This dual proposition is not new, but with evolution it has had a new position given to it, a position of central and formative influence which will make itself most powerfully felt in the transformation and vitalizing of old truths.

No better illustration of this could be instanced than the issue before us. The origin of the moral sense in man has been an endlessly controverted question, and conclusions of vital importance

have been assumed to flow from the adoption of one or the other of the following alternatives. On the one hand, it was said, the moral sense is intuitive. It was implanted in the human soul by the Creator. And on the other hand, it was affirmed, the moral sense is an outgrowth of human experience. It originated in the smallest beginnings, the faintest glimmerings of discernment as regards moral values and moral judgments. If the former account of its origin were justified, then, it was held the moral sense is authoritative, imperious, divine. If the latter hypothesis prevailed it was said to be brought down to the level of all those other conventions of men that have sprung up in connection with the formation of human society, and therefore without implications as regards a higher power.

Theistic evolution brings this controversy to a final end, removes it absolutely from the realm of living issues, and this, because it makes it clear as the day that both sides in the controversy have the truth with them. Each statement, taken by itself, is a half-truth, but altogether misleading in so far as it is exclusive of the other half. The moral sense of man can find its origin nowhere but in God, whose wisdom is the source and efficiency of all this great scheme of things of which we know the gradual becoming. But it has come to be what it is only through man's ever-repeated responses and adjustments of himself to a continually widening moral horizon. Yet the author-

ity of the moral sense is no less emphatic, no less categorical because it has been thus gradually evolved. Nor is it any less distinctly from God because it has come to be what it is through a process.

And this brings into view a principle of the widest scope and of great importance as a clarifier of thought. Evolution has taught us that the beginnings of things and of ideas, as they come into our experience, are not significant. In the past, whenever a belief was challenged, the appeal was always to its genealogy, its origin in human thought. Whence did it spring? Is it a thing that has grown into general acceptance, nobody knows how? Or does it come with the brand of superior birth upon it, the prestige of a great name or a great institution attached to it? Was it noble and commanding from the beginning?

In the light of evolution this appeal becomes every day of less and less significance; a change that might, at first sight, seem like the reversal of a deep-seated mental habit, or even the obliteration of an instinctive demand of the moral nature. But no such revolution is involved. The great process does not abolish the demand for credentials. It simply removes the appeal from a God assumed to have given us finished products to a God Who has worked and still works in a not-yet-completed world, through and by the intelligent co-operation of His creatures. Within the realm of human

origins the change has indeed been revolutionary: and it came as a shock.

When evolution first appeared as a new hypothesis of the creation of the world, the one aspect of it that caught and held the imaginations of the multitude was that which affected our belief in the descent of man. Man, who had hitherto prided himself on being the degenerate offspring of a primitive ancestor far superior to himself, could not easily adjust his consciousness to the fact of a base ancestry, from which the race had struggled upward very gradually, through the tribulation of untold years. The manifest greatness of the achievement weighed but little in the balance against the unwelcome fact of the humble origin. The new derivation seemed somehow to involve contemporary man in the low estate of his far-away ancestors. If he came from the lower animals, must not his nature be one with theirs?

This, I have said, was the aspect of evolution that first caught our imaginations, but very soon it was seen that this reversal of our idea of the origin of man was only a sample, the forerunner of a complete breaking up of our notions of beginnings. Nothing remained unaffected by it. The highest, the most authoritative, the most worshipful conceptions were seen to be involved in this novel theory of derivations. They must, one and all, acknowledge a lowly origin; and we were brought to recognize the fact that the infant

born of humble parents in a manger at Bethlehem was no exception to the order of becoming that prevails in the world-process.

Let it be understood that I am speaking only of the insignificance of origins as they appear in our experience. That their littleness lies only in our apprehension of them, is manifest enough. The greatness to which they have grown, proclaims at the same time the potency that was latent in them and the greatness of the intelligence whence they proceeded. The standards to which they have led and are leading in the evolution of life and thought are not only their credentials of truth, but also the evidence of their divine origin.

This method of reaching and holding a conviction of God's reality and goodness may appear to some as incapable of furnishing men with stable beliefs. It may be said, If our knowledge of the Supreme Being is the outcome of a process not-yet-finished, our thought of Him must always be subject to change. It can never be quite *the* truth. The teachings of the past were authoritative, absolute, unchangeable. They proclaimed a God "the same yesterday, to-day, and for ever." But the God declared in a process is like a cloud in the sky; most beautiful, perhaps, but ever changing its form. Who can be sure that, in the evolution of human thought and feeling, any and every conception of God so formed will not, like the cloud, pass away absolutely? Such indeed may be

the fate of any particular image we may form of the Invisible One. The thoughts of Him that have succeeded and displaced each other in the human mind are innumerable and, probably, no two persons have precisely the same presentiments with regard to Him. But this diversity of view is not peculiar to the conception of God.

No two persons see exactly the same picture when they look out upon the external world of nature, or of social relations. But, with all our differences, we see it sufficiently alike for practical purposes. So with regard to the world of moral values; notwithstanding great diversity in the convictions of individuals and groups, there is a consensus, a body of fundamental agreement to which there has been, through all the ages, coherence and continuity. If our thought of God is rooted in these it will have all the stability that is required, without the rigidity that ensures destruction whenever the growth-forces of evolution burst through the artificial formulas in which men have tried to fetter them. These formulas, claiming to represent absolute and immutable truth, have been forged for the very purpose of counteracting the tendency to variation and instability. And through seasons of spiritual and intellectual stagnation they have held their own, like the vital forces that slumber in seeds that have been carefully kept out of the reach of vivifying influences. But when, from changed circumstances, the time of quickening comes,

the dead form is cast off to be no more renewed. The day of the stereotyped, certified concept has passed. Its very absoluteness and rigidity render its adaptations to new conditions impossible.

Clearly, if we would have agreement and stability in our thought of God we must also have elasticity. It must be something in our experience that lives, that has grown with the growth of human thought. More often than not, when the old forms are discredited, those who openly break away from them couple their denials with affirmations of a reality that stands for them in the place of a personal God. We have such confessions of faith as, "morality in the nature of things," "a stream of tendency that makes for righteousness," or it is the apotheosis of an idealized and worshipful humanity. These bear witness to the vitality and the indestructibility of the conviction of goodness that lay at the heart of the discarded formula.

The affirmations of such unbelievers are of far more significance than their denials; for the affirmations are replete with life and the promise of development. The denials have no relevancy to the real facts of the world. They concern only the forms into which the belief in God has been temporarily cast. The word *personality* may stand for the narrowest conception of embodiment in human form, or it may stand for the personality of a soul, resembling the creative soul of man, only immeasurably greater, without reference to form.

It is not difficult to conceive that the soul of a great man may survive his body and enter upon a sphere of activity immeasurably wider than that of his earthly career. Following this idea we may express our thought of God in some such words as these. He is for each one of us *the personification of the supreme ideal.* He is the living reflex of that which is highest in the whole realm of human thought and imagination.

Not that human thought or human imagination have ever taken, or can take, His measure. It is simply to say that the highest conception of good is, or should be, at any given time in the history of moral evolution, the God of those who entertain it. Holding such a conception, our thought will always be adequate to our need, and we shall always find room for the new thought when we have grown up to it. The stability and the variability will be those of a growing body, changing every day, but preserving its identity. Elements that have outlived their usefulness disappear, to be replaced by other elements that are similar yet different. We, by intelligent efforts, make our own brain-cells, the instruments of our thought and action; and they, in turn, make us. So with our conception of God; we have a large share in determining its form, and it, in turn, forms us.

But, observe, it is just as true that God forms us and also the human ideal by which we climb to a conception of Him. We make God in our

own image because He first made us in His. There is, it seems to me, every reason to believe that we have reached a stage in human evolution that will put us in possession of a thought of God far more stable, more incontrovertible, more restful, more sustaining, more inspiring, because it is a growing thought of Him — one that may always be in agreement with the growing advancing world through which He is ever revealing Himself.

CHAPTER VII

THE MANDATE OF EVOLUTION

WE may sum up the results thus far reached somewhat as follows. Man's knowledge of God depends, primarily, upon his knowledge of himself. Its initial stage was the reflex of man's dawning self-consciousness, and with the deepening of his moral insight and the widening of his intellectual horizon it has ever grown broader and deeper.

But, this is not the only source of our knowledge of God. The great world of things which forms our environment also expresses God, though not so directly and intimately as the human soul which interprets it. Both are from Him; each throws light upon the other and upon their common author. These three, man, nature, God, hang together and in their living relations constitute our knowledge of that which is. No one of these elements can be said to be real if regarded out of relation to the other two. Theology is an abstract, bloodless science unless studied through our knowledge of man and nature. Man is an incomprehensible fragment of reality except as he is studied in relation to God and God's world in

which he finds himself. Nature is meaningless until a humanly revealed God is recognized as its indwelling principle. Theology, then, may be said to be the explication of that factor in the world's history which, while it is distinct both from nature and from man, profoundly influences both. It is a progressive science to which every part of our knowledge is germane. And since God and man and nature are involved in one great process, we must seek and expect to find general principles that hold throughout.

Our study of evolution from the outside brought us to the conclusion that the animated world is essentially the outcome of co-operative agencies, of a supreme intelligence working in and with its creatures, constraining them to multiform activities which contribute not alone to their *immediate* advantage, but which also, through the persistence of co-operation, carry them to an advanced place on the scale of being. By the study of the same process from within we were able to reach, through the facts of man's moral constitution, some important deductions as to the character of God. Man's moral and æsthetic discernments, the innate sense of obligation accompanying these, his instinctive desire to know and to worship a being higher and better than himself, and in general his idealizing faculty, were instanced as evidences of the beneficence of the Being whom he calls his Maker. This is the beginning, the rudiments of an argument that we

must now follow out through many departments of experience.

I

Hitherto, we have been regarding life in its static aspect, we have arrested its flow to make investigation of its essential characteristics; or, in other words, we have examined the fruits of evolution. Now, we must return to the consideration of the not-yet-finished process and investigate the living, never-ceasing stream of influences that work within and without us. The study of these ought to furnish us with a progressive knowledge of what God is *doing*, as the former examination acquainted us with a knowledge of what He has *done*. For evolution implies a God Who is still creating, Who is now engaged in a most significant part of the process, and also a God Who has taken man into partnership.

The influences that work within us divide themselves naturally into two classes. First, those that are intimately bound up with our own personality, that seem to arise from a spontaneous initiative out of the depths of our inherited and acquired constitutions; and second, those that seem to visit us, like ministering angels, from some power not ourselves. To the first class belong all those inward propulsions toward certain more or less definite lines of action which we call instincts. They are the master motives of our lives, and some of them date back their origin to the very begin-

nings of organization. Others have manifestly emerged high up on the scale, but all of them are influences that are subject to modification. The oldest and most persistent, as well as the later, are open to innumerable transformations.

It has been said that man is a bundle of instincts. But it is quite as true that these instincts are continually adjusting and readjusting themselves to new conditions, exhibiting, now on this side and now on that, adaptations and activities hitherto unknown. The most interesting and vitally important of these adjustments are those which obtain in view of the direct efforts of the human will.

The individual has immense power over his inherited instincts. It is for him to say which shall hold the places of honour and power in his life and which shall be subordinate and tributary. Not those which he finds seated in the place of leadership are necessarily to remain in that position. The appointing power is his, if so be he has the strength of will to exercise it. By the persistent application of will power he may organize his inherited instincts into a government of related habits that transform him from a bundle of instincts into a human personality of established character — an organic, serviceable unity, not a mere aggregation. Not that this is the only source of variation of instinct. In human beings the inheritance that comes to each individual has been already profoundly modified in his ancestors.

But before following out this most important question of modifications, let us glance for a moment at the derivation of the motive powers which collectively we call instinct. We have said that it comes to us by inheritance; but let us not be deceived into thinking that we have explained the origin of instinct when we have dignified a mere transmitting agency with the name "principle of heredity." Not one ray of light does this principle of heredity throw upon the *origin* of the guiding influences that have worked the works of intelligence for the animated creation.

In our analogical interpretation of evolution we found it necessary to postulate two sources of intelligence, that of the Creator and that of the creature. Everywhere the study of nature, as well as of human experience, discloses a sharing of responsibility between these two intelligent factors. And furthermore, it discloses a continual change in the proportions of the responsibility resting upon each. The principle seems to be that just so much of the management of its own affairs as it is equal to, is laid upon the creature. This, combined with the recognition of the fact that man, notwithstanding his increased intellectual endowments, is still very largely dependent upon instinct, has opened our eyes to the continuity of the great process as nothing else could have done. And here, as elsewhere, the principle of continuity declares itself an invaluable ally to a sound theory.

The old conception of instinct, that it was, in the animals below man, the only guide to action, the only substitute for intelligence, and conversely, that in man, government by instinct recedes to a vanishing point, was, in its theological bearings, an error of far-reaching consequences. It was an idea that most effectually isolated man. The animals below man were still the wards of the Creator. He did their thinking for them. But man, having been endowed with intelligence, was set off to shift for himself, and, according to the old theology, he had so abused his liberty that he had become an outcast, a repudiated part of the great family. But, by the recognition of the persistence of instinct through all stages of the great process, God is known as an ever-present factor in the life of man; and as our knowledge of the conditions under which we live increases, the more we are obliged to expand our thought of an intelligence working with us that is not our intelligence, but that of a Being immeasurably superior.

And when, looking in the other direction, we push, by the aid of the microscope, our investigations back to the simplest beginnings of animated life, we find no break in the continuity, only a progressive change in the proportional efficiency of the two intelligent factors. The farther back we go, the more difficult does it become to trace indications of intelligence on the part of the creature. And, on the other hand, it is just here that we encounter the most impressive

instances of apparent clairvoyance as related to future requirements.

In the development of the egg from the single nucleated cell, through the successive stages of the multiplication and differentiation of cells, we have an epitome of the history of creation through its myriad forms of ever-increasing complexity. In no part of the whole process is the foresight of conditions and requirements lying in the far-away future so wonderfully evidenced as in those which lie nearest to the beginning. Or, if we confine our attention to a single instance of passing from a given form of established organized life to the one next above it, the evidence of intelligent foresight, of the clear understanding of future necessities, and of provision to meet them is simply coercive in its implication.

As we have said, many of our instincts date back to the very beginnings of organized life. But there are many others that have made their appearance only since the advent of human life, and they have been introduced into the order of that life by the initiative of a higher intelligence, as clearly as any of the more rudimentary ones. Some of these are coercive, some are of the nature of inclinations, solicitations. They are not developed in the same measure in all the individuals of the race. Some of the most masterful, like the instinct for self-realization, is very feebly developed in many, and may be easily discouraged in a vast number.

These more recently developed instincts being very much subject to our control and dependent on our wills for their development, are related to our destinies something as are the forces of nature in the midst of which we find ourselves. They are great motive powers, full of possibilities for the expansion and perfection of human life. But without effort on the part of those in whom they make their appearance, they run to waste. When that effort of the individual is supplied, there is experienced in response to it an additional and gratuitous assistance from an intelligence not ours, supplementing ours, and carrying it and our effort to issues beyond our expectations. This assisting, supplemental intelligence is illustrated in every invention, in every great poetical and musical composition, in constructive triumphs of every kind that have been reached by the overcoming of difficulties. Let us observe what happens in such cases.

The inventor or the composer enters upon his task with only the vaguest notion of what he is about to do. A more or less defined requirement of life is to be provided for, or some new form of expression of dimly understood thoughts or emotions is to be created; and he has within him an instinctive feeling that he is called to achieve this particular thing. He first brings his will to bear by concentrating his attention. His memory of past experiences comes to his aid. It suggests how similar situations have been met, and thus

supplies materials. A constructive tendency of mind, which has perhaps been trained into a habit, carries him on its unnoticed current. And somehow, in obedience to these combined influences, a mystery of mysteries takes place. The nerve-cells of his brain organize themselves in elaborate and often absolutely new combinations, which present themselves to his critical judgment in the form of ideas.

These we will say are only partially satisfactory. They are not in all respects what he wants. But, these reports have given him a far clearer notion of what he does want. The vagueness is in a measure disappearing. The requirements are, so to speak, sent back to the brain restated. Progress has been made, a new combination of nerve-cells is formed and again reported. It is as if the governor of a partially developed country, impressed with the necessity of improvements in certain directions, and with some general notions of what these should be, called to his aid a specialist. Laying before him the outline of the situation to be met, and his general scheme with regard to it, he submits to him the working out of the problem and the filling in of details.

In other words, our invariable experience, in all such cases, points to the existence of an intelligence-not-ours that co-operates with ours and supplements it. *Our* intelligence, *our* will-power, *our* critical judgment, and *our* persistence are most important factors in the constructive work,

but they would accomplish nothing without the co-operation of that other intelligent agent, who is more closely in touch with the secrets of being than we are.

It is needless for us to distress ourselves, in this connection, with the thought of our littleness and insignificance as compared with the Supreme Ruler of the universe. Though we trace the assistance of which we are conscious, in the last result, to Him, there is no reason why we should conceive the administration of His great realm of spirit to be organized on principles radically different from those which obtain in human governments. On the contrary, there is every reason why we should assume a hierarchy of spiritual agents in a world where the hierarchical principle is so broadly and variously exemplified.

The conception of a God Who acts everywhere and directly in all the details of the universe without intermediate agencies is not only crude and cumbersome, but without analogical support from any experience of ours. While, on the other hand, the alternative conception of a God Who is served by an innumerable host of subordinates, each in some particular position of trust, quite corresponds with what we know of the possibilities of mind, and in no way opens the door to polytheistic constructions. It is perhaps wisely ordered that we should have no definite knowledge of these subordinate agents, lest, captured by them, our imaginations should fail

to rise in recognition and worship to the one source of all power, wisdom, and love.

II

Now, let us ask, are we able to state in a few words the principles of which the above considerations are the expression? Is it possible to compress them into a formula which we can carry with us as a talisman through all the vicissitudes of life? At first sight it would seem as if the difficulties to be overcome were almost insurmountable. Such a formula must be the statement of a dual agency, expressed in terms of God and man. It must take a paradoxical form, because each side of it must be as clearly defined and as strongly emphasized as if it constituted the whole. But, we are spared the necessity of invention, for in the ancient repository of our inherited wisdom we find a form that, with its rust knocked off, will admirably serve our needs. It is this: "WORK OUT YOUR OWN SALVATION. IT IS GOD THAT WORKETH IN YOU."

Like a dormant seed, this formula of twelve words has been slumbering through the Christian centuries till a congenial soil should be prepared for it. It contains in itself a whole theology. When, under a different figure, I spoke of knocking off its rust, the reference was to the very unsatisfactory state in which we find the word *salvation.* To some extent in theological constructions, and

largely in popular thought, this word has in the past taken on a specialized meaning. Through long ages it has meant escape, in a future life, from the penal consequences of earthly misdemeanours. Men thought of it only as exemption from physical or mental punishment for their sins. It seemed to them a condition not flowing directly and necessarily from the natures they might have formed for themselves, but a sentence pronounced upon them from an outside source, a doom that might be escaped in something the same way that penalties are escaped on earth by bribing the judge.

A very different view of salvation is set before us by the processes of nature. Here is an egg. It makes, to the eye, no declaration of what it can do; yet we know from experience that its possibilities are very great. But we know also from experience that the realization of these possibilities is conditional. It is a most perishable thing. Only a few of the countless millions of eggs that are produced are ever anything more than eggs. Now salvation, as applied to an egg, may mean a variety of things. It may mean escape from being devoured as food; it may survive the chances of neglect; it may pass safely through the first stages of incubation or all the stages. But none of these escapes constitutes, in the largest sense, salvation. That is fully realized only when it has passed through all the successive stages of its normal becoming to the maturity of the organism that it is fitted to

become. The same is true of every kind of germ-life, souls included.

In the case of souls, it is true, the problem is a thousand times more complicated, but the principle is the same. The salvation of a soul is the full and progressive realization of the highest things possible to it. Creation and salvation are therefore cognate terms. We might even say that in principle they are synonymous. If we associate the word *creation* with the beginning of a process, salvation is the continuance of it, — its rescue, at every successive step, from destruction. Evolution gives us a scientific phrase for this kind of salvation which has a startling, though unintentional, resemblance to the phraseology of the originator of Christianity. The scientific word is *survival.* The phrase of the religious teacher is *eternal life,* escape from death by the continuation of the process that has brought it into being. Salvation, then, is the rescue not only of a soul, but also of a process from premature ending, or misdirection.

With this understanding of the word *salvation* I return to the statement that our formula contains within itself a whole theology. I believe it is capable of furnishing us with the foundations of an eminently symmetrical, evenly balanced theology. It sets before us, in one comprehensive view, the agency of the two great factors in theological thought, emphasizes them equally, and exhibits their vital relations to each other. It

should give us, moreover, a *coherent* theology. For although its statement is paradoxical, suggesting almost a contradiction, this appearance of contrariety vanishes upon its application. And, since it is not the outcome of the dissection of our concrete, real knowledge, but a deliverance in terms of actuality, it can always be submitted to this test of application by the attempt to live it. Whatever superstructure is built upon it may, or rather must, be referred to the facts of human experience for approval: and its constructions are always open to correction from the standpoint of our ever-expanding knowledge.

It is, furthermore, capable of giving us a workable theology, because it is expressed in terms of action. It sets out, not by telling us in elaborate definitions what God necessarily must be, not by defining, on the side of man, the characteristics of his moral constitution and the relations in which he stands to a God abstractly set forth, but it tells us, in no hesitating words, what God *does* in His world and what man has to do.

That this great and pregnant formula should have lain dormant so long is not to be wondered at when we consider its relations to some of the doctrines which have through the ages held sway in the church. In one form or another, it is true, both clauses of our formula were recognized by the Church of Rome. Under its own supervision, it fostered the first as a vital principle in the government of men. The activities

which it prescribed for working out one's own salvation were various, but they admit of classification in two kinds which, to some extent, overlap each other.

On the one hand there was the conception of a salvation to be purchased by the conciliation of an offended God. This, the survival of a very ancient form of belief that expressed itself through all the phases of paganism in sacrifices, has held its own to some extent in nearly every form of organized Christianity. True, the one great sacrifice had been substituted for the many. By that, God was said to have been propitiated and the demands of justice, once for all, satisfied. But, between the realization of the benefits acquired by this and the devout Catholic, there extends the indefinite vista of purgatorial punishments, and the reduction of these has always been an incentive to the working out of what appeals to the imagination as a very real salvation.

But the methods prescribed contemplated outward activities rather than inward changes. It was a salvation to be purchased, an indebtedness to be worked off, a definite amount of punishment due, to be proportionately reduced by charities, by mortifications, or by the payment of money for special intercessions on the part of the church.

In contrast to this, though sometimes combined with it, was a conception of salvation and a method of securing it much nearer to that taught

by evolution. It was nearer in that the salvation, laboured for, was to be achieved, not by a change in the attitude of another being, but in the disposition and characteristics of the individual to be saved. Asceticism, in so far as its motive was the subjugation of the natural man and the achievement of a higher personality, was vitally in touch with the morality of our day. But it was radically different both in its conception of the personality to be worked for and in its methods. These latter, as essentially negative and destructive, were the reverse of those of an evolutional morality, which are constructive and progressive, and only in a subsidiary way, repressive. The ruling principle of asceticism was depletion, the getting rid of life's natural exuberance, which was assumed to be incompatible with the ascendancy of the spiritual part of man: fastings and vigils, the neglect of cleanliness and the ordinary laws of health, the closing of all the avenues of mental stimulation and growth, in short, the virtual suppression of the whole being for the elimination of the evil incidental to its natural activities.

The ruling principle of evolution, on the other hand, is nutrition, the building up and strengthening of every faculty, the fostering of every interest that promises an increase of life, and then, the use of this accumulated power for the control of the whole man and for the development of the interest which declares itself to be the highest.

Asceticism found a warrant for its ideals and methods in some of the sayings of Our Lord which, taken by themselves, seem to be its endorsement. But it is much more ancient than Christianity. It is a natural growth of the human soul becoming conscious of itself and of the warring elements that contend within it for the mastery. It has its grand qualities notwithstanding its mistaken ideals and methods. In its recognition of a better self to be worked for, of a warfare to be waged, of a degradation to be escaped, it was the expression of instincts that are the spring of all higher moral evolution and salvation. But as it was a fight against nature, a reversal of the law of constructive evolution, it was doomed to failure; and the demonstration of its practical futility helped to bring discredit on any and every attempt to work out one's own salvation.

Theoretically, Protestant orthodoxy excluded our formula more absolutely than Roman. Its substitution of salvation by faith for that of prescribed works, its doctrine of inability, election, etc., seemed to leave no room for the practice of the first half of it. But, the exigencies of the *actual* dominated the situation. Militant Protestantism, forced to work out its immediate salvation in the midst of a hostile environment, was in little danger of losing its virility by reposing on a theoretical salvation that had been, or was to be, worked out for it. "Trust in God and keep your powder dry" was its motto. The removal

of the barrier of the church had, moreover, brought men face to face with the fact of God. And the men of the early days of Protestantism felt God, and knew God working in them, with an intensity proportioned to the conviction that they were His chosen instruments for the execution of a great work.

And again, the Protestantism of that day was strongly tinctured with the spirit of asceticism. The subjugation of self through the suppression of natural instincts, the banishment of joy and of much that ministers to the sense of beauty and the refinements of life, were in the line of working out an impoverished kind of salvation; and a salvation it was to many souls. For, though pursued in defiance of theology and under the inspiration of inadequate and often misleading ideals, it was heroic work accompanied by a conviction of the approval of a righteous and all-seeing God. The appointments of man might do much to thwart, but they could not prevent the grace of God from working out salvation in response to the sincere efforts of his creatures.

Protests against the traditional theology were made now and again; and the first clause of our formula was emphasized by dissenting bodies as the expression of the only true way of salvation. But the strength of such movements was largely absorbed in negations, in protests against the assumptions of the old, rather than in whole-souled efforts to frame an affirmative doctrine

that should be a constructive power in the hearts and lives of men. The time had not come for such a reconstruction. But, we can see how these critical protests were preparing the way for it when the history of the world should have become transformed in the light of evolution.

The doctrines of our inherited theology were, in great measure, the counterparts of the conditions in which they originated. The expansion of those conditions not only cleared the way for, but necessitated a like expansion in theology. The change required was much like that which characterized the passing of the crude science of the Middle Ages with its alchemy and its astrology, its mixture of fact and superstition, into the modern science of research, inference, and verification.

CHAPTER VIII

WORK OUT YOUR OWN SALVATION

HAVING made the assumption that our formula, "Work out your own salvation, it is God that worketh in you," is a comprehensive expression of the religious content of evolution, we must now see if it will stand the test of our method. At this stage in the discussion we hold it only as a working hypothesis. We must proceed to make applications of it, now on this side and now on that, to the actualities of experience. So doing we shall progressively establish its truth, if it be true, and at the same time instruct ourselves as to the possibility and means of a satisfactory realization of it.

Hitherto, for the sake of exhibiting it as an integral truth, we have glanced alternately at the contrasted sides of its dual reality. In what follows I will ask the reader to follow me in a closer and longer look at the first clause of it. "Work out your own salvation." If we give ourselves time to take in the full meaning of this appeal it will carry us right into the heart of life's most urgent problems. One of these, the ques-

tion of its morality, its relation to the exhortation, "Live for others," I will not enter upon now, as we shall meet it at a subsequent stage of the discussion.

First, let us give attention to the similarity of the first clause of our formula to that phrase which expresses, in the most succinct form, the motive power of all evolution, — "The struggle for existence." The resemblance between the two is such as to suggest identity, and this suggestion has been responsible for two modern schools of philosophy that ask us to follow them to the most bizarre and dismal conclusions. Schopenhauer, on the one hand, with the "will to live" as the sole incentive of life, and Nietzsche, on the other, with his "will to power," have each in his own way illustrated the ruinous consequences of a method that has, in every department of speculative thought, led always and necessarily into bottomless morasses of absurdity. Such systems win followers for a time, partly because the excitement of smashing things is always exhilarating to a certain class of minds, more especially if those things be customary restraints to liberty of thought, emotion, or action, and partly because they embody an important element of truth.

The misleading method to which I allude has already occupied our attention. It is the method of searching for the realities, the great moving principles of the world, in the dismembered

elements of our concrete knowledge. The realities that we have learned by hard experience, that hold their place in our lives because we are obliged to live them, are taken to pieces for the discovery of their inmost vital principle. At the end of the analysis some one of the factors, because it is persistent, is assumed to be the sole generating power of all the varieties and values in which it appears as an element. In other words, the whole content of life is reduced to its lowest terms by an arbitrary cancellation, and we are assured that the surviving factor represents its absolute value. Science traces back the various manifestations of energy in the universe to one persistent force. We are asked, therefore, by a certain school of thought, to see in this the sole principle of everything that is, and to adjust our estimate of values accordingly.

The principle of evolution has given a great impetus and scope to the employment of this method. For the gradual becoming of all things, from the simplest beginnings, lures the imagination with the hope of finding in these the measure of life. Since man has to trace his genealogy back to the lower animals, we are to go to them for the valuation of all that, in the upward march of evolution, has proceeded from them. To understand the vital principle which underlies the complexity of human experience we are asked to eliminate from it all its more advanced developments till we reach some one basic principle that

is common to all life. Then we are to assume that the meaning and value of all human thought, emotion, conviction, all its standards, all its ideals, all its hopes and expectations and motives of every kind, must be expressed in the terms of this one common principle.

The struggle for existence, the will to live, it is affirmed, is such a principle. It is the parent instinct from which all other instincts and incentives of every kind have sprung and of which they are modifications. In the increasing complexity of human developments, it is said, these have taken on certain artificial and fanciful aspects which have tyrannized over the human imagination, as superior and entitled to authority. But as matter of fact, they are in no way superior. They are, one and all, reducible to the primitive impulse of life, — the will to exist, or, as Nietzsche puts it, the will to power. Religion, morality, ideality of every kind, all man's notions of the nobility of his nature, are simply obscure phases of this root principle of all life.

That these interpretations of human life have drawn to themselves many followers, is, as we have said, largely due to the fact that they embody a large element of truth; and, furthermore, that this truth is one easily grasped and of great virility. It is the truth that meets one at every corner, that forces itself upon us wherever busy men are pursuing the ordinary ends of existence. It brings before us the forcible,

violent element in life, before which its gentler persuasives seem things of inconsiderable weakness. It is the echo of our armaments and gigantic preparations for war that stand out in such strong contrast to the theories of our civilization. It is true also that there is much pretence and much self-deception in this world. Men take advantage of legalized morality for the furtherance of nefarious schemes and the satisfaction of predatory instincts. And, again, it is true that morality, on its religious side, has had its diseased outgrowths that have, to some extent, poisoned life with malarial doctrines and betrayed it with false issues.

This element of truth has been sufficient to blind many to the inherent and essential fallacy of the scheme of things which these philosophies represent. And, for the limitation of the number of their adherents, we are indebted to the *results* reached by them — pessimism on the one hand and the apotheosis of brutality on the other — far more than to any formal exhibition of the fallacies that underlie them.

But, for the purposes of this discussion, it is desirable and necessary that we sift this matter to the bottom; for, as we have already intimated, the two very diverse streams of development, ours and theirs, take their rise in the same source; namely, the struggle for existence. This is the great motive power of evolution reduced to its lowest terms; it is the incentive to effort common

to the whole animated creation. It is only with the assumption that it constitutes the *sole* motive of human activities that we now join issue; and we do this, not, primarily, in view of the forbidding results reached, but on the ground that it is absolutely unscientific, that it traverses the facts and principles of evolution, and that every stage of the argument derived from it is characterized by the distortion of human experience.

Through its whole course the process of evolution is marked by the introduction of new factors, — new not only in appearance, but essentially new in that they supply a hitherto unknown kind of efficiency. These factors may have been evolved from, or in connection with, antecedent forms and factors, but none the less do they contain an absolutely new element. Throughout the world we see differences of degree passing over into differences of essence, though we are puzzled to know at what point the transformation takes place. We are also abundantly familiarized with the phenomenon of potent influences appearing in the life history of the race that have no connection, so far as we can see, with what has gone before. They come in as superior officers come to take charge of troops in the organization and drilling of which they have had no part.

This might be illustrated by what takes place in every department of evolution. But there is no one that appeals more directly to our common

experience than the one that is specially germane to our subject; namely, that of instinct. I will therefore confine myself to that.

Those who have devoted themselves to the special study of instinct in young animals have established the fact that these make their appearance not all at once, but successively, and at considerable intervals in the life history of the individual. One is predominant at birth and, though it may rule the situation only for a few days, establishes in that short time fixed habits that persist through life. Then there emerges another quite different and often antagonistic instinct that takes control, the one first developed retiring to a subordinate position.

For instance, the congenital instinct of a newly born animal is to attach itself to the creature that is nearest to it at birth; that is, to its mother. But if, in domestication, it becomes familiarized with the presence of man during these first days it accepts him also as a friend. But this friend-making tendency is soon superseded by the quite opposite one to suspect and avoid new acquaintances. A new instinct has been evolved, the object of which is to guard its possessor against the approach of enemies. All ranchmen know that a calf dropped in the bush is practically a wild creature unless it is discovered within a few days of its birth.

Now what is true of the individual is true equally of the race. Primitive instincts, having

served their time, have a tendency to retire, leaving behind them in the organism a more or less defined inheritance of habit; while, on the other hand, new dominating instincts aspire to the place of control. The whole process of evolution is accompanied by and hinges upon such a succession of instincts. The ascent to each advanced stage is conditioned upon the development and, in the case of man, the fostering of some instinct that has made its appearance in his life as a *new* thing, and often as an influence antagonistic to one that has been hitherto predominant.

Every such juncture is a critical period, a tide in the affairs of the race or of the individual that should lead on to higher things. That it does not necessarily so result is manifest. The higher instinct may be allowed its full normal share in the succeeding development, or it may be repressed and overridden by the stronger instinct that is rooted in habit. As a matter of fact, life presents itself in many cases as a long-drawn-out conflict between such instincts and tendencies: the new struggling to gain a foothold, the old clinging with tenacity to its established sway in the organism, — a veritable epitome of the life struggle, racial and individual, in which we find ourselves.

It is upon such a critical period that we enter when the race passes from the domination of impulse to the dawning regime of reason. The

reasoning, inhibitive tendency, confronts the impulsive, strives to hold it in check, to postpone and restrain its action. The impulsive, on the other hand, ever and anon rises up in rebellion and struggles to throw off this upstart, restraining power. If the development is normal, these two principles will settle down to a joint control, the impulsive, holding still an important place in the initiative of the progressive life; the reasoning, exercising the regulative, directing, steadying function. Superior on the scale of being as the new faculty is, it cannot get on without its colleague. Only by working together, supporting and regulating each other, do they advance upon the pathway of the higher life.

As to the instinct that specially interests us,— that of self-preservation, or "the will to live," — it is indeed congenital and universal and, at first, finds itself in absolute control; but at an early stage its supremacy is disputed. The generative instinct, even in the simplest forms of life, emerges not as a modified form of the will to live, but as a principle antagonistic to it. It does indeed result in the perpetuation of life, but that result is not the motive that impels to the satisfaction of it. On the contrary, it always involves a sacrifice of a portion of that vitality that has been stored up by the antecedent instinct. When an amœba, grown large with abundant nutrition, sets off from itself another quite independent organism that goes its separate way, it is not the

continued action of the will to live that is operating, it is a totally different instinct, — one that involves self-surrender, self-depletion. It gives half of itself away for the satisfaction of an instinct that it does not in the least understand.

Whether such separation is attended with birth-pangs, or not, we cannot know. But we do know that, as we ascend the scale of being parturition and maternity are everywhere accompanied by suffering and sacrifice, and by a partial surrender of the life that has been so carefully guarded and valiantly fought for. And this element of surrender, of freely giving away that which has been hitherto husbanded, is illustrated as fully in the vegetable world as in the animal.

Let us consider the history of a tree. "It divides itself into two epochs, each of which is dominated by a process seemingly the reverse of that which prevailed in the other. In the first period, self-assertion is the rule. The struggle for existence, at the expense of every surrounding thing that can be of use to it, is the apparent end and exhaustive expression of its activities. It robs the soil, it contests the possession of territory with other forms of vegetable life. It overshadows and destroys many weaker relations on its way to prosperity. Its roots burrow far and near, contending with other roots for every morsel of nourishment. It is, in fact, a greedy, insatiable thing that gets all it can, but never parts with any of its strength. But when this

has been going on for years — for decades perhaps — a most wonderful thing takes place; a flower makes its appearance.

"Were our experience limited to the growth of a single tree, the advent of this beautiful and marvellously adapted organism would be a thing utterly strange and unaccountable in connection with the tree that had hitherto borne nothing but leaves. But, more wonderful than the miracle of the flower, is the miracle of the process which it ushers in, a process the reverse of that which has hitherto characterized the tree. That which has been accumulated is now freely given up, and the energies of the plant are henceforth largely diverted into the production of that which is soon to be separated and altogether estranged from the producer. The whole process of flowering and seed-bearing is of the nature of a free surrender of life-substance in such a way that no return can ever be received. With many plants it is the giving up of *all* their life. They perish when the process is finished. In every case it is exhausting, and growth is interrupted by it."*

Recurring now to our formula and recalling the definition of salvation as the progressive realization of the highest possibilities of our being, it will be seen that its appeal emanates from an instinct that overarches and includes within itself many other instincts. Not that it is the

* "What is Reality?" p. 477.

latest developed, but that it retains its position of authority always. Other instincts emerge to which it must adjust itself, but it assimilates and uses them in the prosecution of its own never-ending work. We have already alluded to this overarching instinct as that of *self-realization.*

This is, in its own right, a master-instinct of human evolution. At its advent man becomes man. We cannot say that it is absolutely wanting in the races below man, but, in him, it assumes an importance and sway that obliges us to recognize in it the motive power of human education, the dynamic that drives the human machinery, individual and social, toward some unknown state of being, a fuller realization of powers and aptitudes, the nature of which is, as yet, only foreshadowed. That man is, or may be, something vastly superior to what he now is, is the constant implication of the pressure that moves him and often drives him along the way of a larger life. It makes use of intelligence, while it transcends it; and the *idealizing faculty* is its constant and necessary coadjutor.

This, a most distinctively human attribute, is at all times the light which determines the direction of energy. It points out to the imagination some object, or goal, to be striven for, invests it with a dazzling attractiveness, makes it seem the one thing to be desired, and on it the passion for self-realization fastens and concentrates. It is not an infallible guide. In fact men are fond

of calling it an *ignis fatuus*. It is for ever disappointing and, the disappointed ones often say, "betraying" those who follow its lead. But, for all that, it is the indispensable condition of human progress. It breeds desire in men and lures them to arduous undertakings. Breaking up contentment with an assured routine which, in the animals below man, terminates development, it generates a self-impelling force that drives them up steep and rugged ways, seeking new outlets for their energy.

Now let us observe that, under the sway of the ideal, the instinct of self-realization becomes itself transformed. At first, and through much of its career, it works in harmony with the principle of self-preservation, or the will to live, but at innumerable points, as the process advances, it runs counter to it and restrains it. Self-preservation has regard to the continuance of the present state. It is conservative, takes no unnecessary risks, conforms to that which has been and is. Self-realization is impatient of that which is. Cognizant of the ideal future, it gladly takes risks in the hope of realizing it. "He that saveth his life shall lose it" is its answer to the prudent counsels of the older instinct.

Schopenhauer's "will to live" becomes, in his hands, a principle of insatiable progressiveness only because he transcends his formula, identifying it with the will to an ever-increasing, extending, superabundant life. And when Nietzsche en-

larges the outlook by his phrase, "the will to power," it is that he feels the insufficiency of the preceding formula. It is an admission of inadequacy, but a very meagre one. The instinct that urges to self-realization does, *sometimes*, take the form of a will to power. But this is only one of an innumerable number of quests that draw men out of themselves and make them impatient of mere existence. And what is more, it is far from being the noblest, or most satisfying.

A distinguishing characteristic of the life to which self-realization, combined with the idealizing faculty, introduces men is its manifoldness, — the divergence of the ways by which it leads them to transcend themselves. The tribes below man are most restricted as to the means of gratifying their instincts. They are narrowly hemmed in by circumstance. The way in which they must walk is clearly indicated at every step. Primitive man is in much the same predicament. But, when intelligence has enlarged the field of possibilities, multiplied the avenues and the modes of realization, the element of discriminating selection supervenes to complicate and dignify the situation. It is at this point that man becomes, in a measure, a law unto himself. The world is, so to speak, before him, he is the arbiter of his own fortunes. The kinds of man that he may be, the kinds that he is solicited and perhaps importuned to be, depend largely on his temperament, his natural endowments, and his social

setting. But there are few who are not drawn in more than one direction.

The value and boundlessness of this race inheritance dawns very gradually upon human consciousness. One of the emotions engendered, as man emerges from the enthralment of the mere struggle for existence, is that of exultation in newly discovered powers; and hero-worship is the result. Every exceptionally great man is an embodiment of the perfections possible to human nature, and the heart of the worshipper swells with pride at the thought of his relation to it. Legends of great deeds, epic poems, mythologic demi-gods, are expressions of it. And this primitive mood is also a persistent one, depressed at times into a minor key, but anon swelling again into enthusiasm. At first its theme is man's superiority over the beasts who are physically stronger than he, then it is the triumph of man over man and imaginary monsters, and in these later days it is man's subjugation of the forces of nature. Now, as at the beginning, men are prone to burst into a delirium of rejoicing when a representative of the human race scores new victories in any direction.

But, with all its vitality, this mood of self-glorification expresses but a small part of the change that has been wrought by man's advance in the scale of intelligence. It is but the occasional effervescence from elements that are working out serious transformations in the depths of

his nature. Hardly has he reached the consciousness of himself as a superior being than he discerns in that future of allurements also a land of shadows, a land of forbidding possibilities where weird shapes pass and repass. Fear, as well as hope and exultation have come to stay with him. He carries a weight on this higher plane of existence that he never knew before. His eyes have been opened to the knowledge of good and evil. He has become a responsible being. His conception of character, of personal worth, has begun to develop; and the discernment of essentially higher and lower possibilities, that are in a measure within his control, steady and sober his outlook upon life.

We cannot wonder that, under the stress and anxiety of this higher consciousness, men should have been led to contrast unfavorably the higher estate with the simpler one of narrower issues, that they should have regarded the passage from innocence to insight as a fall, that they should have looked back with regret and envy upon the lot of those whose lives were marked out for them, who were firmly led, without knowledge or forethought, anxiety or misgivings of theirs, into the ways that were best for them. The existence of a great historic Church that has, through the Christian ages, assumed the responsibility of giving such a guidance to a world weary of its liberty is the standing witness to the exacting and trying nature of the higher career, upon which

human intelligence and the power of moral discrimination has launched the race.

Looked at from one point of view, the outcome of human evolution is seen to be very evil. From the time of his majority on, man has shown a most fruitful and perennial aptitude for mismanaging his affairs. His career, from the dawn of intelligence and moral responsibility to his present status, has been marked by blunders and insanities of the most far-reaching and tragic character. The development of his moral nature has produced an appalling amount of wickedness, in which the creatures below him in the scale of being have no participation. They are unmoral, he is immoral. They may be fierce, predatory, regardless of the suffering they inflict on others, but they are not, like man, knowingly and exultingly cruel, vicious, devilish; they are not, like him, the victims of unbalanced natures and conscious degradation.

To rectify that which is unbalanced, to curb the passions that lead to the inordinate development of quests that are properly means to higher ends, is the task which occupies man increasingly. His salvation is never worked out, but with every individual, every form of society, in every age, the conflict between the normal and the abnormal, moral sanity and moral insanity, growth and degeneration, the triumph, or defeat, of the life forces that make for a nobler type of being, is renewed. And the more complex life becomes,

the more the power and control of man increases, the hotter is the battle between the opposing forces of good and evil. In the midst of our infinitely varied life of to-day, with its thronging incentives and seductions, the call to work out one's own salvation is more imperative, more stirring, more clearly fraught, on the one hand, with the note of hope and of enthusiasm, and on the other with that of despair, than in any age that has preceded it. There is a breadth and a scope to its meaning that it has never had in the ages of narrower horizons.

But what of the night? How goes the combat? Is the human race losing, or gaining? Are individuals battling successfully in the turmoil of material interests, that now surge against each other and anon combine in a sweeping current that is all but irresistible? And this great complexity which we sometimes call the social organism, or, in vaguer phrase, human civilization, what shall we say of this? Is it a success? Is it moving on to higher and better things? Or is it an advanced stage of degeneration, the forerunner of anarchy and dissolution? From the standpoint of current thought this would seem to be the most momentous question of our day, the riddle in which every one, from the most buoyant optimist to the Cassandras of pessimism, are interested.

But it is worse than useless to attempt an answer to it until we have determined a point that, in the logical order, necessarily comes

before it. What constitutes success in the evolution of progressive being? Toward *what kind* of a realization on the ascending scale are we, as a race, or as individuals, moving? If we make a mistake in our answer to this question we may be looking fixedly for the truth in the wrong direction, gazing into the west to see the sun rise.

CHAPTER IX

THE FUTURE OF EVOLUTION

WHAT constitutes success in the evolution of progressive being? This question, if considered from the standpoint of the individual, would produce a great variety of answers, none of which would have anything other than a personal value. What we require is an answer which, though speculatively reached, is the outgrowth of a careful study of the facts of the one great process of evolution of which we have any knowledge. Our investigation is not for the purpose of amusement. It is one of serious import. We are making an effort to attain to a fuller knowledge of God and of man, and of their mutual relations, by ascertaining the end toward which both are moving.

I

The data for such a forecast must be sought both in the relatively near and in the remote past; that is, in the history of evolution that antedates the appearance of man, and also in the history of human evolution. We must look into the former for analogies to guide us in the formation of

hypotheses, then we must scrutinize the latter to see how these hypotheses fare when tested by the facts of human experience. The first glance at the situation is discouraging. For, so far as we can see, many of the distinct advances in the process have been sprung upon the world as surprises. When a new type has emerged it seems to have appeared on the scene suddenly; proceeding, probably, from an antecedent form, but, as related to it, a monstrosity, a strange creature with an enlarged organization and hitherto unknown aptitudes and functions.

The whole course of evolution is marked by such new departures, each one of which has run its own specialized career and settled down into a permanent type, which apparently leads to nothing beyond itself. What we see around us is a multiplicity of such arrested developments, each one of which seems to signalize a dead-stop in the process. Like the branch line of a railway, it has its terminus, and beyond this there is no thoroughfare. There may still be indefinite variation, but the type is persistent; that is, the tendency to revert to it is far stronger than the departures from it and prevails over them. Nothing essentially higher than a horse can be bred from a horse by successive modifications, nothing essentially higher or different from a man can, by ordinary generation, be bred from a man.

But now, taking a wider view of the situation, we are rewarded with a principle of continuity

which is distinctly helpful. While arrested development, indeterminate issues, and degeneration, abundantly characterize the great process in its details, there is discoverable, from a higher point of view, a well-marked through-line of evolution. Every higher stage of being is higher in virtue of an increased complexity of organization, and it is always from the more complex that the next higher springs. I am speaking, be it understood, of the great movements, the epoch-making advances of evolution, — advances like that from the inorganic to the organic, from inanimate to animate forms, from the non-sentient to the sentient, from homogeneous aggregations of living beings to complex organizations in which many different orders of beings with different functions unite to make one highly complex being with one central consciousness. So also the advance from sedile forms to those capable of moving from place to place, and that which distinguishes the simplest mode of propagation, by budding or segmentation, from that of sexual generation.

These epoch-making advances mark the main course, the through-line of evolution. When a great step forward has been made we are justified in the assumption that progress is to be looked for in this line. There was a time when gill-breathing animals were the highest type on earth. But when lung-breathing animals appeared, the future of evolution was theirs. The structural changes that have marked these upward move-

ments have been many and various, affecting all parts of the body. But there is one factor that shows a constant increase; that is, the nervous system. The enlargement and complexity of this characterizes every advanced step. The importance of the upward movement when man appeared on the scene can hardly be exaggerated, though its significance was not in evidence at the time of its development. It was, indeed, provided for in his structural formation, but as this was far in advance of the immediate necessities of a being only slightly removed in his habits from the creatures just below him, it afforded only a faint hint of its future.

Could there have been a comparative anatomist there to study this new type he could have discovered nothing to make him suspect that a radically new chapter in the history of evolution had been entered upon. True, the greatly enlarged brain-cavity would have been to him the prophecy of a being superior to any that had hitherto existed. But this advance was in the regular line. Here was apparent provision for a great increase in the volume and complexity of the nervous system. But all the difference indicated could be summed up in terms of more or less, and the whole course of evolution had been characterized by the continual increase of this particular element. He could not, in the most courageous flights of fancy, have approximated to the reality of the possibilities that lay dormant

in that enlarged cerebrum; for the order of creation, as it had been hitherto, would have held his imagination in leash.

We are measurably in a similar position. We are, more or less, hampered as to the largeness of our expectations by the past of human development which we know and can study, and our forecast of the future is limited, more or less, by the belief that what has been will be, with modifications. But, there is a vast difference between knowing nothing of what human evolution is and is to be, and knowing as much as we do, — a difference as great as that between absolute darkness and twilight. It is not simply that our knowledge of the situation is increased, that we are able to look back over vast realms of experience and achievement that have been gradually realized through the effort and cumulative growth of generations; it is not alone that we are apprised of the fact that all the advances of evolution antecedent to man are as nothing in comparison with that which his advent signalized. In addition to all this knowledge, and of far more importance than it, is the training we have received in the course of its acquisition. We have learned not only how to accumulate knowledge, but how to use it, how to bring its parts into relation to each other and to organize it for additional conquests.

And furthermore, our imaginations have been trained and disciplined till they have become reliable instruments for the construction of a

hypothetical future. Nor is the use of this instructed faculty a matter wholly contingent on the will to use it. We needs *must* construct a future for ourselves, whether we will or no. The irrepressible speculative instinct streams forth of itself in imaginative ventures. It is futile to try to repress it. It is our highest privilege to curb, direct, and use it.

To return to the question in hand. The knowledge that the appearance of man signalized a radically new departure in the great process, justifies us in the assumption that the next higher type will be in the line of human evolution.

A very pertinent question suggests itself at this initial stage of the inquiry, in view of the enormous differences which distinguish contemporary from primitive man. Do we find any evidence to warrant the belief that we have already entered upon the higher stage that we are seeking? That is, are there indications that a new, distinct species has already become a living reality alongside of and closely related to the older type from which it sprung? We can answer at once that there are many developments which seem to point in this direction. But their value, as related to other evidence, will appear at the end of the discussion rather than in the middle of it. In the meantime we may carry it with us as an hypothesis that may be strengthened, or the reverse, by our investigation. We have remarked, in passing, that nothing radically different from a man can be expected to

spring from the *genus homo* by ordinary generation. That is, man's physical structure seems to be as fixed as that of any of the animals that surround him.

But there is this great difference. There exists in man one department of his organization that is indeterminate. This department, the nervous system, has been the instrumentality through which all the advance, from the most primitive to the most highly evolved man, has been achieved. But all this difference has, from one point of view, been realized without giving rise to a new type. The cumulative result has not been accomplished through the agency of ordinary generation; it has not passed by physical heredity from father to son. And, if we must limit ourselves to the definition of a new type which this point of view involves, we not only have not entered upon its realization, but we can find no encouragement for anticipating that we ever shall enter upon it. For this definition, following analogy, shuts us up to the hypothesis that somehow and somewhere there will emerge from the human race a preternatural individual, superior, physically and mentally, to man, and that from him a prepotent type will be established, producing a race of beings of like superiority.

But all our knowledge of the history of evolution, both antecedent and subsequent to the appearance of man, discourages any such expectation. Superior individuals have, it is true, made their

appearance, all along the line of our social evolution, who were as much above the average of humanity as the hypothesis demands. There have been many such who, if they could have reproduced their kind by natural generation, would have given us a race of beings as much superior to man as he is superior to some of the orders next below him. But this has never been the case. These qualities are not transmitted in any such degree as to build up a new type. There is sometimes a modified inheritance through a generation or two. But the law that seems to dominate the situation is that of reversion to type. There is no permanent accumulation of qualities registered in human organization.

Each individual of the race begins life's career with a practically similar outfit of instrumentalities, powers, and adaptations. What he becomes, depends upon the quality of the organism he has inherited, plus his own choices and efforts. He may rise far above his progenitors both in acquisition and in character, he may build up a physical organization of brain-cells that separates him by a wide interval from the great multitude of his fellow-creatures. By himself he belongs to a superior race; but it goes no further.

Over against this genealogical impass we have to set the fact that, with man, another kind of heredity has come into the world. Each great mind has left behind it a spiritual inheritance, a veritable progeny of minds that has conserved and

transmitted the new factors introduced. Each new tendency is represented by a specialized class of minds that retains its peculiarities from generation to generation. Not far back in our history some of these classes were called guilds, and these guilds kept as closely to themselves as any well-defined species. New blood was at times introduced, but for the most part they were close corporations. But where these visible demarcations were lacking, the separateness was maintained by natural aptitudes and disabilities. Birds of a feather flocked together, assimilated, fostered, and perhaps improved upon, their special inheritance.

Now if the matter ended here we should have made no progress toward the discovery of a new persistent human type. These specializations are, generally speaking, indeterminate variations that are continually commingling and passing over into each other, — functional differences that leave the human agent simply human. The permanent element is really that which has become the property of the race.

II

The *race*. — Here again we touch a unity, — that is, the conception of a unity, — and the idea grows apace and takes shape. All the differentiation that we have been considering is seen to converge and find a structural justification as parts of that race unity. Each department is seen to

be an efficient and more or less necessary factor in that which we call the social organism. This wonderful complex of human constructions has come into being as their product. And, at this point, biology comes to our aid with an analogy that is one of the most luminous of modern discoveries. It is the a. b. c. of evolution and the reader will pardon its recapitulation.

At the beginning of animated existence the unit, the individual, is the single cell, living its isolated, independent life and multiplying only by dividing itself into two identically similar cells which continue to be as absolutely independent of each other as the original cell. Then appears a marvellous change. There comes a time when the new cell, instead of separating from the original one, remains connected with it. Many subsequent cells do the same, and instead of isolated individuals we have a community with a certain solidarity of interest and mutual support. Then another change. This community gives rise to cells of a quite different order, which also remain attached to it and perform important functions for the benefit of the whole community. This gives us a rudimentary organism, and the same process, repeated over and over again by the production of new classes of cells with new functions, each of which takes its place in the life of the expanding organism helpfully and without disturbance, gives us the succession of associated beings that culminates in man.

This process is recapitulated every time a new individual is born into the world, and in the history of the formation of civilized society we seem to have a repetition of it on a more extended scale. This latter is the cumulative outcome of a succession of new types of men, each with hitherto unknown abilities, insights, and aspirations. Each new type has added something to the collective life of the race of the nation, which is thus gradually organized into a solidarity in which every part is more or less dependent upon the normal activity of all the other parts.

The exceeding fitness of this analogy has drawn from different departments of thought the most extreme affirmations of its soundness as the exponent of reality. One tells us that the nation is not only an organism, it is a personality, and a moral personality,* while another declares that the individual, as related to the social organism, is naught but a fragment of social tissue.

Even though we should think it desirable to state the case less absolutely, these affirmations embody an element of unquestionable truth. The social organism is an actuality, it is a real entity, a great living, expanding, energizing, progressive reality. It is, from one point of view, the product of human activity, but it is equally true that the great achievements of the race are its outcome and are dependent upon it. In it we live and move and have our being, and it is

* "The Nation," by Elijah Mulford.

clearly advancing to still greater complexities of organization.

So impressive is this view of the situation, so fraught with the anticipation of great future developments, that many, in our day, would have us rest the case here. What need is there to look further when an unfinished work of such magnitude is committed to us? Is it not folly to try to look beyond it when we can as yet hardly begin to see what is contained in it? Can we afford to deplete our energies and our enthusiasm in the contemplation of that which is far off, uncertain, and vague, when more than we can command of these is required for the prosecution of the work in the midst of which we find ourselves, battling, as it were, for very life?

The answer to this view seems to me capable of statement in very few words, and so, because it is simply a marked illustration of that infirmity or rather immaturity of judgment that has been in all stages of human evolution one of the greatest obstacles to progress; namely, short-sightedness. All along the course we can see that this has worked, both in individuals and in society, for the production of arrested development. The vice of modern society has been said to be, living too exclusively in and for the present, or the immediate, that which seems just a little way beyond us. And in all ages the mistake of mistakes has been that of substituting means for ends, — seeing in the instrumentalities of life the ultimate goal for

which it is worth while to give up our whole lives. We can see, as we survey the lower planes of human effort and ambition, how this mistake, embodying often a large element of wilfulness, has led to the wreck of individual lives full of high possibilities, how it has extinguished in disillusion and despair the light that might have shone with an ever-increasing brightness, how it has submerged in deepest gloom souls that were constituted for progressive happiness.

The social organism, stupendous reality that it is, cannot be the goal of evolution, the final end toward which the process moves. It cannot be, first, because we can see through it and beyond it; second, because there is nothing in it, or in its tendencies, to suggest a fruition worthy of the great process, and third, because its adjustments and its working, from first to last, seem to imply an order to which perfection is impossible. When we try to forecast a future in which the social organism is to figure as the culmination of the process that has brought forth man, we are not only hopelessly bewildered in a maze of conflicting issues, but, when we have tasked our imaginations to the utmost, their best presentations seem but a mockery of the ideals that have loomed large in the vision of prophets and poets, — a satire on the laborious, long-drawn-out warfare that has led up to them. The light fades out of our Utopias even while we gaze at them, and they are seen to be cold, passionless things.

What then shall we make of this great reality? If the social order is not the final goal of evolution, what explanation of it can we find? Is there any conceivable end, sufficiently important and valuable, to figure as the justification of this great stream of elaborately organized energy?

There is, it seems to me, one, and only one, that meets the requirement; and one word expresses it — education. Etymologically this word is closely allied to evolution, but it carries a much higher significance in that it calls attention to the advanced reaches of the great process, while the word *evolution* has always been associated with its earlier stages. Evolution has, from the beginning, been a word of offence to those whose interest in the world's becoming has centred in its latest products, for it seems to implicate the whole of reality in the category of blind forces. The word *education*, on the other hand, affirms and emphasizes intelligence and the development of character through discipline. The former suggests the unconscious, mechanical aspect of nature, the latter a more or less conscious process under the guidance of a higher intelligence.

I am speaking, be it understood, of *education in the most comprehensive sense;* that is, the sense in which the whole development of the human race, individual, social, political, and religious, may be construed as an education. The conditions of that education, its environment, the problems to be worked out, the means and instrumentalities

to be employed, the agents to be educated, have been supplied and brought into relation to each other by the supreme intelligence that works in all nature. In the earlier stages the individual knows nothing of what his existence means nor whither it tends. Nevertheless an important work is going on within him. The conditions in which he finds himself necessitate effort and warfare for the salvation of the body, and this body is of such a nature that effort and conflict increase its wants and, at the same time, its power of acquisition.

At every step of the way, the organism, both social and individual, encounters new problems to be solved, new difficulties to be overcome. In every relation of life it is sorely tested and stimulated. It is often a severe discipline. The fact that it is an *upward* career is made painfully apparent. The human spirit often faints before what is required of it. It cannot cast itself loose from the lower creature from which it has sprung. It is dependent upon it; and its demands, often imperious, have to be listened to and provided for and at the same time regulated, controlled, governed, in a word, educated.

The history of this upward career of the human race presents many points of view. It is a warfare, it is a conquest, it is a triumph; it is also a defeat, a long-drawn-out story of loss, degeneration, tragedy. The law of increase for those who face the situation and fight the good fight is offset

by the law of loss. Powers and opportunities are forfeited by those who refuse. The upward way means hardship, labour, patience, endurance, suffering. It means also joy, exhilaration, peace with oneself, in a word, abiding happiness. The two are mingled. The disciplinary part is not, in most lives, an uninterrupted strain that breaks the spirit. The reward of activity and earnest striving is closely associated with it. The compensations of life are not postponed to some far-off event of the future, they are, in the great majority of experiences, immediate. Life is a thing worth cherishing for its own sake, even though it fall short of the fullest salvation, — the realization of the highest things possible.

To study and understand this method, so amply illustrated in human history, is to study and to understand the great intelligence that has instituted it. He has declared Himself in it more fully than in any other department of His creation; and, in our own painfully developing science of education, we have the sole key to its interpretation.

Let us then make the hypothesis that the social organism is the embodiment of an educational process,—a great training school, broadly planned and firmly administered by a higher intelligence; a school of discipline calculated to stimulate and draw out innate powers, to forge character through grappling with and overcoming difficulties; a curriculum for elevating, expanding, purging,

purifying humanity, — not, perhaps, the whole human race, but the survivors of it, those who, with the help of a power-not-themselves, work out their own salvation. Not that this concept will at once solve all our difficulties. The terms of the hypothesis forbid this. For if the provisions made for the education of man are the outcome of an intelligence higher than his, it follows that there will be some adjustments, some relations of more or less, that he cannot altogether explain. But so far as the general scope and intention is concerned, the truth of this interpretation will, I think, appear increasingly as we study it and submit the realities of history and current experience to it.

CHAPTER X

ANALOGY FROM THE NERVOUS SYSTEM

WHEN we were outlining the analogy which exhibits the points of resemblance between the evolution of a human body and that of the social organism, our attention was directed collectively to all the classes of cells that contribute of their diversity to the organized unity. The contrasts of form and function which these different orders present are an apt illustration of the diversities of temperament, aptitude, ability, ambition, and function with which we are familiar in the human constituents of society. But now, having passed from the study of the *constitution* of the social order to the question of its *meaning*, we may contract the field, and avail ourselves of the analogies afforded by one department, or class, of these cells.

I

The nervous system is marked off from all the other organic agencies that serve a human body by radical peculiarities. It is as much above all the others in the scale of being as man is above the creatures of mechanical routine. As matter of fact the great differences which exist between

the different orders of animals are largely conditioned upon the gradual expansion and complexity of organization in this department. It is the only department in which there is continual change, in which there is a progressive creation of new forms with higher functions, and in which there is a clearly defined subordination of orders which have been successively developed.

"Every tissue of the body," we are told, "except the nervous tissue, has but one dead level of function. No one bone, or bone-cell, has any higher rank than another bone or bone-cell, any more than one brick in a building is of a higher, or more important grade, than another brick, simply because it is put above, or below."* In the nervous system, on the contrary, there is, just as in human society, a higher and a lower order, a governing and a governed, a class that directs and controls, and, on the other hand, subordinate classes that carry into effect. These latter were the first in the order of evolution. They constituted the original, comparatively simple nervous system, which responded almost automatically to external stimuli. But, with the ascent of the biological scale, a superior class of cells emerged to take charge of the more complex situation. It is the office of these cells to organize, direct, control, and *educate* those lower in the scale.

* "Brain and Personality," by W. Hanna Thomson, M.D., LL.D., p. 137.

With reference to this aspect of cell-life the author just quoted writes as follows: "In studying the development of a nervous system from a physiological point of view, the first principle discernible as governing that development is what, in any other connection, we should term *discipline*, and we cannot do better than to note how the conceptions suggested by that word are applicable to our subject." * In pursuance of this application Dr. Thomson represents the superior grey motor-cells of the surface of the brain saying to the grey motor-cells of the spinal cord, "You were the original nervous system, to be sure, just as there were horses before there were men to ride them, but since I have come, I am above and you are below, and as it is, it took long, patient training and a great deal of trouble to break you in to my service so that you would act according to my orders." †

Somehow, in response to the persistently repeated action of uniform stimuli proceeding from the superior afferent nerves, there are formed what are called nerve-centres, or ganglia, characterized by an ever-increasing complexity of organization and function. These are the physical basis of habits. By oft-repeated stimuli the nerve-centres have been organized and trained to respond through the efferent nervous system in an orderly and uniform way. The results are varied, because the organization is as complex as

* *Ibid.*, p. 134. † *Ibid.*, p. 139.

the needs of the organism which it serves. All our vital functions, like breathing, the beating of the heart, etc., are carried on automatically by these nerve-centres that have been trained to habitual action. By what adaptive intelligence these wonderfully complex instrumentalities have been called into existence, in response to afferent-nerve stimuli, no physiologist can begin to tell us. In the whole process we have to recognize a creative power working with the co-operative microscopic beings which we call nerve-cells.

Here, as elsewhere, we discern that power working, not by itself upon unresponding inactive material, but, always in conjunction with and through active agents. And here again, as elsewhere, we find the creative process not only a gradual, but also an educative one. The development of the co-operating cell, even though microscopic, seems to be one of the ends in view, though never the final end. Each individual in the series is tributary to a collective life and efficiency beyond itself, and each unit of organization so formed is again tributary to a higher organization which subserves ends of larger significance and value.

All the nervous centres of which we have spoken, each one a most elaborate system in itself, are spheres of organized influence that have been so trained to habitual correspondence and harmony of action that they, in connection with the afferent stimuli from the outside world, carry on the opera-

tions of the different vital processes in a normal body without friction, hesitation, or disturbance of any kind. They work each one silently and effectively; and so perfectly equal are they to every change of adjustment, necessitated by change of environment, that we ordinarily take no note of them. But, with all this elaborateness and perfection, they are but factors in a grander organization, that of the human body as a whole, which, from the higher point of view, is seen to be the end for which they have been created and educated. Each one fits into its place in that higher unity, subordinates itself to its requirements, works harmoniously with all the other departments, and thus prepares a perfected living mechanism to be taken possession of by that wonder of all wonders, — a human consciousness.

Where does this new factor, this new controlling agent, come from? How does this *one*, conscious, intelligent, commanding personality spring from the multiplicity with which it is vitally connected and over which it is placed in authority? Does it spring from it at all? May it not be a being of a different order sent from some higher centre of power, like the governor of a dependent province, to look after and be responsible for its interests? Whatever the truth may be from an ontological point of view, this latter conception, from a practical point of view, fits the situation in some important respects. True, the new-comer is not, at his advent, in control of the situation. He is

not at first the educator, but the educated. The whole complex organism with which he has to do and on which he is dependent is in perfect running order when he comes on the scene. It has, so to speak, a vast experience as related to his inexperience. He has at first to be its pupil, and only gradually reaches a position of knowledge and mastery that fits him to assume the government.

But, when this stage has been reached, it is manifest that he is the end for which all this wonderful complexity of organization has been elaborated. Human history is the record of the use that individually and collectively he has made of his power. It is not, however, to the external evidences of his achievements that our attention must be directed in this connection, but to the more intimate, internal relations sustained to the world of nerve-cells and centres which he not only administers and governs, but the organization of which he has immensely extended. Acquired faculties come to the birth, are organized, trained, and perfected by this dominating personality, and each one of these is physically represented by a special community of nerve-cells.

Until the formation of these acquired faculties there is great uniformity in the nervous system of different men. But, from this on, there is the widest diversity. The majority of men build up for themselves the faculty of expressing themselves in language. Many organize the cell

combinations that enable them to interpret written signs and those that give them the power of expression by the same means. Beyond these acquisitions the nervous systems of individuals become separated by very great divergencies. One constructs within his cerebrum a veritable laboratory for the working out of physical problems, another a study stored with volumes for the writing of history or philosophy; another has acquired an organization that makes him a wonderful dancer. Every man who composes music, or who renders it by his skill as a vocalist or instrumentalist, has built up for himself a special organism of his own for his personal use. So also every one who has developed skill in any kind of occupation, handicraft, or interest has, by directing attention and effort in a given direction, modified the nervous mechanism that he has inherited.

In all this diversity we see the results of human educational methods persistently directed to special ends. But when, advancing a step farther, we look at all these results collectively, and seek to carry out our analogy by the discovery of a still higher unity, to which they are all organically related, we find ourselves at a loss. For it is a unity of personality that we are seeking; and this the social organism does not give us. All its values have to be estimated in terms of the human individual. Its usefulness, its opportunities, its

happiness are nothing except as they are realized by its separate constituents. It is indeed a most valuable instrumentality for the furtherance of human interests, of human discipline, of human education, but it is nothing more.

Another step is necessary. We have seen that, when the organization of the human body reached a certain stage of perfection, there appeared, from some unknown source, a mysterious being vitally connected with it, that took possession of it, ruled, disciplined, and formed it. Let us make the hypothesis that some such being exists who sustains to the social organism relations similar to the above, — that the human race, as a whole, is related to this being, somewhat as the nervous system of a man is related to his central consciousness and will. This hypothesis not only completes the analogy, but it completes and satisfies the requirements of the great process, the coming stage of which we seek to formulate.

For clearness of thought, we may once more narrow the field of our analogy. We will assume that the Supreme Being is related to the human race as a human person is related to some one of the special faculties that he has created and trained for his own use. This places no limitation upon the thought of the Supreme One. We are but a department of His universe, one of His interests. It has, on the other hand, the advantage of illustrating, by a natural process, the fact and the method of our creation by Him and, further,

of His continued superintendence and co-operation at all stages of the process.

The history of any one of our brain specializations would serve our purpose, but I will choose that of music, not alone because it is one of the most elaborate and clearly set forth as to its processes in our consciousness, but also because it ranges from the most ordinary levels of experience, through every phase, to the most transcendent. We can, therefore, trace the process of education, mark its stages, and see how each one leads up to that which is intrinsically higher on the scale of natures and values. There is a foundation for music in our physical organizations which antedates any action of ours with regard to it. Its beginnings are matters of vibrations, outside the organism, which are responded to by afferent nerves and conveyed to a centre where they come into consciousness. There is no music until this consciousness has been reached and made a participating factor with the nerve-stimuli that have led up to it, and it is only when attention has focalized this consciousness that the process of cell education in which we are interested begins.

The first steps are experiments in sounds and sound combinations. These are selected from, remembered, repeated with pleasure, varied, expanded, organized. A chord is a distinct achievement, a tune is a wonderful accomplishment. Each has a *raison d'être* and completeness in itself.

But music does not stop there. As we follow the course of its evolution from these simple beginnings through a long and elaborate development as a great science and art, we find ourselves contemplating a microcosm of diversified agencies which has a certain completeness in itself, but also an incompleteness, a lack of finality, in view of a larger unity into which it may enter as a factor. The player on a violin has constructed a wonderful nerve-organism which responds to his bidding alone. He may be very great as a soloist. So also a symphony by a great master is a creation that stands out clear in its separateness as a finality. It has its own completeness. But every soloist, composer, and composition is also a link in an endless chain of development.

Even when we contemplate this great department of human achievement as a whole we may take very narrow views of it. It is in one aspect a science, and all its agencies and outcomes may be expressed in the terms of science. In another aspect it is an art, to be judged and regulated and cultivated in accordance with the canons of art. But, in a higher sense, it is a medium of expression for the most exalted thought and feeling. And, more than this, it passes over from the rôle of instrumentality to that of leadership and becomes the pioneer in realms that transcend our experience. It carries us whither no language can follow it; it becomes a most potent revealer of the ideal.

But, in the face of this grand reality of development, we have to recognize the fact that all great musical creations, both as regards composition and performance, have to come back to the individual, the human person, for their origin and for their interpretation. Unless we recognize the existence of a higher personality in whom all these human combinations centre and find their meaning, they are unattached, floating, evanescent dreams, vaporous emanations from the persons with whom we can connect them. They are human personality rendered with variations, and not to be taken seriously.

Just so, when we contemplate the more comprehensive social organism. There is before us a most impressive world of reality that has come into existence as the result of the corporate life of innumerable human beings. But the origin and significance of it all, unless we postulate some higher personality, must be referred back to human persons. We cannot say that it centres in them, for it finds no centre, no interpretation in the little world out of which it has sprung and which it has far transcended. The corporate life that so strongly suggests an organism has no real unity in itself. It foreshadows such a unity, preaches it to us every day of our lives by its manifest tendencies, its repetition of analogies, its unattached, inconclusive, unmeaning issues, its constant demands for a realization that cannot

be supplied. But the moment we supply that missing factor of a superior being, to whom we sustain vital relations, the situation is transformed. Order emerges, the unmeaning finds its perfect solution, the unattached its fitting attachments, the unfulfilled its way of fulfilment.

As in the field of music all the curiously formed instruments for its production, all the elaborate nerve-organisms in myriads of individuals for its understanding and its rendering, all the great compositions and orchestras and composers, are seen to be, in their wider relations, only instrumentalities for the development and education of the human soul as related to the supreme soul, so the great corporate life of humanity as a whole is seen to be pre-eminently and essentially a great training school by which the human is led up to a progressive comprehension of and union with the divine.

In the knowledge of our relations to that higher life we first begin really to live. We project ourselves, our thoughts, our hopes, our ambitions, our affections, all that is highest and best in our aspirations, into that larger life, to which we are tributary, of which we are part, which we can serve, whose battles we can help to fight, toward which all our emotions of loyalty and love and worship may find their full and inexhaustible satisfaction. This is not a future to which we are looking forward, a life to be lived in another world. It is the living present. The life that

has hitherto found its attachments only in human persons and interests is transformed by it, becomes, in embryo, that of a new creature.

But now, let us ask, how does this affect our conception of and our attitude toward the social organism? Does it become a thing of small importance in our eyes because we have found out that it is not the final end of existence? On the contrary, our discovery invests it for the first time with elements of nobility and with values of incalculable significance; for it is vitally related to a transcendent life in which we find the meaning and fulfilment of ours. It is the instrumentality, the school organized by infinite wisdom, to educate us for that life. But, while it is this, it has, at the same time, a significance and completeness of its own. It is an interest to be lived for on its own account, since we, also, are its makers and measurably responsible for it.

It is the joint outcome of the co-operative working of God and man within that environment of uniformity which we call the order of nature. It is ordained of God, it is built up by man, half blindly, half intelligently, in response to constraining influences that he dimly recognizes. We cannot definitely analyze this co-operative working. We cannot say God has worked alone here, man has worked alone there, or that, in this other matter, they have worked together. Under the guidance of analogy we construe the great stream of uniform influences as the *habitual*

working of the Divine Wisdom in conformity to the nature of things. And at certain points we *think* we recognize the initiative of the divine, or of the human, in new departures.

II

Let us now return to trace, along the line of our analogy, the development of the social organism and some of its characteristics. For the same analogy that we have used to illustrate the *constitution* of the social order throws light upon the process of its becoming.

That stage of evolution which is represented by a community of cells, each one of which closely resembles every other, is a striking illustration of primitive society. One man may differ from another in his power of domination, but this is a matter of degree, not of radical difference. It is only when a man arises possessed of a new idea, a hitherto non-existent formation of brain, that the differentiation on which the social order is based begins. When such a man appears, he is, as related to the uniformity which surrounds him, a freak of nature, and he is so regarded by his fellows. They may worship him, but that is usually an afterthought. At first they are inclined to fear and persecute him. He is abnormal and not to be tolerated. Sometimes he is dragged outside the camp and stoned; sometimes he is permitted to live out his life with his developing idea for company.

In this latter case he sometimes leaves behind him a permanent modification of primitive conditions. He has brought forth something, some invention, or some thought, the value of which others have recognized and which enters into the race as a new, persistent factor. Every repetition of this process makes the nascent society a little more complex, and we seem to see in it a rehearsal of that orderly succession of creations by which the human body has come to be what it is.

But the whole process is different in that we can more clearly trace, all the way along, the influence of each of the associated agencies that have been at work. So far as details are concerned we are often in doubt, but of certain main tendencies we can be tolerably sure. The initiative of the whole movement must be traced to that instinct, that passion for self-realization, which distinguishes man from all that is not man. This God-implanted instinct is the source of all human development, social as well as individual. The new *growth* has been along individual lines, but the *organization* has been largely effected by non-human constraining influences. Only at a somewhat advanced stage of the process does man begin to be conscious of the social order as something which he has had a hand in creating and for which he is in a measure responsible. But if, with this discovery, he jumps to the conclusion that he is the sole author of it and that he can destroy with impunity that which he has uncon-

sciously constructed, he is labouring under a fatal mistake.

The principles of this social order are the outcome of a wisdom far exceeding his, and experience teaches him that they are as stable and as coercive as the fundamental laws of nature. They are, in fact, no other than what we call the laws of nature. The social order is the natural order. There is a certain amount of elasticity to it. Important modifications in the adjustment of its details are possible and desirable. It is the problem of our lives to study and find out how best to make them. But we cannot go far in any direction without coming up against principles, to violate which means only social annihilation.

We have the same kind of liberty under the unwritten laws of organized society that we have under the laws of agriculture, or the laws that govern the well-being of a human body. We can accomplish great things while we work in harmony with these laws, supplementing, guiding, controlling their action, but if we disregard them, they work against instead of for us. It is not difficult for us to draw up, from the standpoint of what we think ought to be and might be, a formidable arraignment of the situation in which the human race finds itself. It is easy to show how things might have been more wisely arranged. But, when our radically new devices are put to the test of human experience, we are continually scourged back to the methods which we had thought to supersede.

The training school organized by an intelligence higher than ours, whatever may be said in criticism of it, works better than our inventions, and the curriculum of experience is recognized, in the long run, as the only thoroughly trustworthy one. It is severe, but it is effective. It has produced and is continually producing tragic failures, it involves much incidental suffering; but, on the other hand, everything that is of value in human life and thought and feeling is its outcome. Life is good for nothing when we once get out of this school of character. True, one of the great incentives to human effort *is* to get out of it, to achieve an independence of its coercions and become each one his own master. But if, when we have thrown off the harness of necessity, we neglect to harness ourselves, in some sort, the zest and the value of life is gone. We must lay hold of some worthy interest and make it ours, fall in love with some end, or ideal, to which we can give a whole-souled devotion, otherwise, there sets in a natural degeneration, physical, mental, and spiritual; in fact, we begin to die.

By rising above the coercions of necessity we have only entered an advanced form, a higher grade, — a most perilous situation for those who are not alive to its opportunities and responsibilities. We shall never, perhaps, at least from our present plane of existence, be able to see why the tasks set in the great school might not have been made something less severe, the assistance

given to those on the verge of discouragement more timely. And, from the standpoint of this inability to fathom the ways of the Almighty, the most searching questions are urged upon those who would defend the doctrine of the goodness of God.

Why, it is asked, if a benevolent intelligence is responsible for the existing order, was the true and normal way of living left in such obscurity and made so perilously difficult? Why has man, formed for intelligence, for morality, for happiness, been so long on his blundering way to a realization that ever recedes before him? Could not man and his environment have been so adjusted to each other as to ensure prosperity, peace, tranquillity, contentment, and the kindly relations between man and man that naturally flow from such a condition of things?

To put it reasonably, why was not the human race, from the beginning, so constituted and so related to its environment that a form of society like the best that we have realized and proved to be possible should have been quickly reached and retained? Why were the abnormal ways of squandering life made so attractive? Why were the right and the wrong so inextricably mixed up that nothing seems altogether right or altogether wrong, but only a matter of degree, of more or less, of moderation or excess? Why should the way of honest ambition, the impulse to realize our powers, sweep us, so often under full headway,

to a moral catastrophe? Why is the civilized world to-day, with all its long experience and conflicts, its many and exhausting attempts to improve itself, in a condition that in some ways seems more difficult and more hopeless, in its ever-increasing complexity, than in the days of its greater simplicity?

These are tremendous questions, and it is neither useless nor impious for us to ask them. God, Who has formed us not to be dumb, driven cattle, must intend us to ask them and to work at the solution of the problems they suggest. We may be very sure that none of the answers we give will be final, that the future of the world will modify them, but we may be sure also that we shall continually move toward a solution so long as we stick to the hypothesis that exhibits the existing social order as a great training school. Whatever else it may be, it certainly is this; and by the recognition of the fact, every one of these questions is, so to speak, loosened. The hard knots into which the reverse hypothesis has drawn them give way. The gravest difficulties of the situation are seen to have their ground in an unwarranted assumption, — the assumption, that is, that the end of social evolution is, or ought to be, the comfort, the happiness, the freedom from care, anxiety, or friction of the whole community.

Our view of the situation sees in the *absence* of contentment, of completeness, and of peace the conditions that make for the highest well-being

of the race. The greatest gifts, those of inexhaustible value to humanity, are its wants, its dissatisfactions. All those things that we have been demanding as our moral right are seen to be the prizes held up to stimulate our efforts, they are purposely put beyond our reach, with all sorts of difficulties to be overcome before we can enter upon the enjoyment of them. And this, because the great end to be attained is not our enjoyment of them, but the development of man into a creature of a nobler and higher type.

Except for the briefest intervals we never quite overtake our dreams of happiness. The permanency they seemed to promise is never realized. It is always the beyond that we live for and worship. We are by nature insatiable, and the world in which we live is wonderfully well calculated to stimulate our desires and lure us on. And what is true of the individual is equally true, and of the same significance, in the evolution of the social order.

The dreams of a perfected social organism, of a millennium of peace and tranquillity, of social equality and fraternity, in which every one is satisfied, bear the same relation to reality that is born by those other visions that sometimes keep the individual man steady to one purpose through a lifetime for the realization of a condition that never materializes. Neither in the one case nor in the other, are these dreams realities to be possessed and enjoyed. They are ideals to be

worked for, ideals adjusted to our very limited understanding. And being so adjusted, they are continually readjusting themselves as we approach and seem about to grasp them.

Is this world then all a system of cleverly framed delusions? Are we doomed to be for ever striving toward ends that will cease to interest us as soon as we have compassed them? It is, indeed, truly so. No fact, nor class of facts, is more clearly and incontestably established in the experience of the human race than this. "Vanity of vanities, all is vanity, saith the preacher."

But this is not the whole truth. Though we may not realize our dreams, our labour has not been in vain. Though the special satisfactions on which we had set our hearts have not been accomplished, many other things have been, — matters of far greater and more enduring value. And without entering into detail, we may comprehend many of these in that one word *education*, character-forging.

I say many, not all, for whoever labours wisely for the achievement of personal or social ends adds something to the solidity and effectiveness of the instrumentalities by which we live. To do this, to build up, improve, and fortify the social order is one of the great ends of human existence. Though not the final, it is the proximate end. To labour wisely for this, to discern truthfully the particular part which we are fitted to play in it, and to perform this faithfully,

in the consciousness of our corporate implications and responsibilities, is to honour the life that has been given us and to live in harmony with the supreme intelligence that has ordained and superintended it.

CHAPTER XI

THE GREAT IDEAL

ASSUMING then, that the social order in which we find ourselves is not, even in its greatest perfection, the goal of evolution, but an instrumentality, a great training school, the next question is, For what does it train us? What values in the immediate or remote future can we conceive as adequate to justify the severe discipline to which we are subjected? It might be replied at once that character in itself is an acquisition of inestimable value. But even so, something more needs to be supplied. Character, without something in which it can realize itself, is a mere abstraction. There must be an objective reality of adequate worth to which it can be applied, or it is a barren concept.

It might indeed seem, at first sight, as if the results reached in the foregoing chapter rendered valueless any attempt to answer this question. If, as we have said, this world is a system of cleverly framed delusions calculated to lure us on to continued achievement, if we are for ever leaving our imagined heavens behind us,

of what use can any speculation of ours be? Even if a divine seer could put before us a true description of some remote stage of the higher type toward which we are moving, is there any likelihood that, from our present standpoint, we should be able to understand its value, or attractiveness? We may, indeed, on the ground of continuity, analogically construct a scheme of probabilities with regard to the proximate stages of the future. We may vision forth a social organism on a higher plane, in which each one who has acquitted himself well on earth will find himself promoted, with re-enforced powers, to a sphere of enlarged activities and increased responsibilities. But this does not fill the requirements. It belongs still to the category of instrumentalities. Though the promotion be from the custody of one pound to that of authority over ten cities, it still appeals to the imagination as a matter of more or less.

I

What we want to find is the one supreme, all-embracing interest that is and always will be worth while, — the ever-enduring, inexhaustible satisfaction. Can we discover any way of approach to an understanding of this? Sometimes, when the main and obvious and apparently only road to a place is hopelessly barred against us, it happens that a side-road, unpretentious, unobserved, and roundabout, will bring us to

the goal of our desires. This is not the first impasse of thought that we have encountered in the course of our discussion. Let us bring to bear upon it the method by which these others have been reduced. We have seen that some of the most obstinate cases of this kind are rooted in a false analogy. May it not be so here?

The little word *end* has, in this connection, much to answer for. It is a word that we use, and shall probably continue to use, as a synonym for purpose without meaning all that it implies, and yet our thought is influenced by its implications. We say "the end toward which we move." We may not think of that end as a finality, but yet the suggestion of finality attaches to it. The word, of course, is not altogether responsible. We have made choice of it for this purpose because we have somehow formed the habit of thinking of the future statically, of imagining a definite, fixed condition as the goal which will finish our labours and satisfy us.

Now, let us change the conception. Instead of asking "to what all-desirable end does evolution carry us," let us ask to what sublime and all-satisfying activity does it seem to point. I think we shall find this workable. In the first place, it is a conception fully in harmony with evolution. Abandoning the idea of fixedness, which was the essence of the old thought, it takes a firm grip on the great reality of this world as

a world of movement. And at once our personal recollections of past experiences jump to the endorsement of this construction. For our greatest satisfactions have been always, somehow, linked with our activities, and somehow, also, they have faded out with the decline of those activities. It is true that one of the most accepted and cherished thoughts of a better world is that it will be a place of rest. But this is only a provisional conception. Rest prolonged beyond the time of necessary recuperation becomes restlessness. There is nothing abiding in it. Just rest enough to give a renewed zest to activity is all that we can make use of in this world or another.

Following then the lead of this idea, that our earthly training will find its application in some unique and very exalted form of soul activity, our first step may profitably be an inquiry as to the nature of the satisfaction which we derive from our ordinary activities. As these range all the way from those that are purely physical to those which are almost as purely spiritual, our inquiry might seem to have an interminable outlook. But it is only to one particular characteristic of our activities that I wish to call attention, namely, that they yield their greatest values to us as *side issues.*

In our efforts to grasp life's prizes there is a continual recurrence of certain secondary products that are not disappointing. They cannot disappoint us because we have had no expectations

with regard to them. They flow in, as it were, from the side. If, when our attention is called to them, we try to make them the direct object of our designed activities, they are capable of disappointing us, like anything else. They are the rewards of earnest striving for the achievement of other interests. They come to an end, it is true, when the particular form of activity, in connection with which they have been generated, ceases. But they spring up anew with each new pursuit, and their cessation in each case leaves no bitterness behind it. The memory of them is purely one of happiness. Although the fruit for which we climbed was not worth while, the remembrance of the climb is exhilarating.

"The Preacher," who proclaimed all things to be but vanity and vexation of spirit, made, in the same connection, admissions that fatally discredit his aspersions of life. In each quest to which he addressed himself he declares that he received great satisfaction during all the period of his approach to the object of his desire. Every hour of his working toward each of his prospective ends paid him his reward, in good coin, which he took and appropriated. His heart "rejoiced in his labour," a rejoicing that might have been continued indefinitely and increasingly had he not been so unfortunate as to out-fly his quarry and put it to death. There are two points which this aspect of life opens for our consideration.

First, that this experience of the Preacher

emphasizes a great principle of life, one that is limited to no one class of experiences, but is true in every department of our manifold activity. Let us formulate it in some such hypothesis as the following: *Progressive being and progressive satisfaction in being are to be looked for in the line of life's side issues.*

Without minimizing the importance of the direct outcome of our ambitions, we may safely say that as related to the great end of life they are of subsidiary value, means to an end — the end being the increase and perfection of being. Every faculty normally exercised tends to become something higher in the scale of being. Its range is increased; it grows stronger, finer, quicker in its response to other faculties, and ever more firmly integrated as a vital part of the organism to which it belongs. So also with the organism as a whole. The cumulative effect of its efforts in the various directions of its activity raises it, by a series of unmarked gradations, till it has come to belong to a superior order. That this is *the* purpose of the great process, that for which it exists, is made increasingly probable by the fact that it is accompanied by happiness.

This is nature's endorsement of its normality. In its lower ranges this consciousness of well-being, of progressive becoming, may yield a happiness only somewhat higher than that of healthily developing animals. In its higher ranges it is the underlying source of the deepest satis-

factions that human beings can experience. We have then a gradation of happiness, the degrees of which correspond to the successive stages of growth. And, if we may find ourselves justified in postulating an unending ascent in the scale of being, for the human personality that keeps its place in the line of promotion, we have a good basis for a definite hypothesis as to the future of evolution.

It will, I think, clear the atmosphere, at this point, if we address ourselves to an examination of the kind of satisfaction that attends the consciousness of progressive being; for it has elements that are clearly distinguishable. In the first place there is in it that element which, in the widest signification, we may call *worship*, and in the second place there is the sense of movement toward something better, the exhilaration of acquisition and attainment. Both are elemental in human nature. They are referrible to nothing lying behind them save the great intelligence that has implanted all our enduring instincts. Both are essential to the highest well-being. The first belongs to the region of ideals, the second has regard to the pursuit of them. All along the course of soul development they work together. The ideal gives rise to the pursuit. The pursuit, in turn, causes the ideal to deepen and expand and to hold the soul with an ever firmer grip.

I have called the first *worship*, because that word alone, by including the lower as well as the

higher forms of human devotion, expresses the continuity of that principle which I believe to be the motive power and, at the same time, the end of evolution. The use of such a word will seem no doubt to strike a strange note when applied to the subordinate pursuits of our ordinary lives.

Worship, to our ordinary thinking, dwells in a place apart. It is a transcendent activity of the soul, if it be real; a solemn and perhaps wearisome observance, if it is a mere formality. What we call public worship, represented by innumerable churches, exalted music and psalmody, an army of priests and supporting worshippers, is a department of life quite separate from the world of our daily strivings. But there is another signification to the word. There is a worship that finds its expression not only through established forms, but more essentially and helpfully in every experience of life. It is not a matter of time or place, of "this mountain or Jerusalem," but the joyous uplifting of the soul that, always and everywhere, worships the Father in spirit and in truth.

With this signification the sphere of worship is immeasurably widened. The word connotes not alone a specific act, a rite observed, a duty performed, not merely an exalted, but occasional and specialized, experience, but, rather, an attitude of soul, an abiding passion, a specialized life, a new being. But even this enlarged conception fails to exhaust the meaning of the word, or to express the far-reaching influence of the

principle which underlies it. That energy of the soul which, when it is directed to the supreme ideal we call distinctively *worship*, has innumerable manifestations. It is not a mere figure of speech when we say that a man worships power or wealth, his dream or his profession. Not all the characteristics of the higher worship are there, but the moving principle is; and when the same principle rises to higher ranges, its transformation is the result of the different nature of that on which it expends itself.

We have therefore a gradation of worships, illustrated not alone in the successive development of distinctive religions, but also more clearly and vitally in the quality of the ambitions and quests that constitute the great volume of progressive life which we call human evolution.

It is a principle which so far as we know is peculiar to man. That is, we have no evidence that the animals lower in the scale share it to any great degree. Or, if they do, it is probably unconscious, — not a matter on which they can reflect. The look of devotion with which a dog regards his master does, indeed, suggest the worship of a person. The ambition of a horse to be swifter than all other horses, and the collapse of his spirit when it is proved that he is not, is akin to the worship of an ideal, and the skylark pouring out its heart as it soars into the heavens seems the exultant expression of it. But man, looking before and after, not only becomes con-

scious of his ideals, he, more or less consciously, creates and fosters them.

As soon as creature wants are supplied the man who has the seeds of development in him begins to reach out to something higher. There is some sort of a vision. It may be that of power, of feeling himself to be greater, more influential, more forceful than those about him. It may be the vision of accumulation and possession; it may be that of creation, the ambition of the poet, the architect, the composer, the painter, the sculptor, the inventor, the organizer of an industry. It may be the ideal of the discoverer, who feels that every onward step in science is a step upward for the human race.

For the realization of any one of these ideals there must be concentration of attention and energy. And in connection with this concentration, this narrowing and deepening of the stream of vitality toward one end, there springs up a feeling, an enthusiasm which, without violence, we may call the worship of the ideal. Sometimes the object of supreme desire takes violent possession of a man. His imagination is captured and held. The ideal quickly becomes an *idée fixe*, an obsession. His life is controlled by it, and all his energies, if he be a man of achievement, find their outlet in this one direction. But more often, it is a quiet, natural growth. There is a gradual building up from the dawning of the first impression, the first feeling of attraction, to the

recognized ideal. And before this domination of one desire is attained there is often the growth and decadence of many lesser ideals.

The episodic, kaleidoscopic ideals of youth chase each other through the years of immaturity, each one surrounded with a temporary glamour, intense while it lasts and apparently imperishable, but, fading away as one more luminous appears on the horizon. Each one leaves a residuum of feeling and experience, a compound of disillusion and regret and, probably, a measurable hardening of the susceptibilities of the imagination. As the man approaches maturity he is likely to exercise his critical faculties more, to question the seductiveness of this, or that, appeal for his devotion, to ask, Is it worth while? is it what it appears to be? will it fulfil its promises?

If it stands these challenges and still holds the imagination, its attractiveness increases. Every time the man turns away and looks back again there is a stronger light upon it. It acquires form and clearness of outline. He no longer *thinks* he sees, but, he sees the object which is above all other things desirable. When a man reaches this stage he generally experiences a great happiness. For the chief want of his nature, an end to live for, has for a time at least been met. Even though the realization of his ideal seems at the beginning almost hopelessly out of his reach, its mere existence, as a well-defined ideal, gives him a glow and a satisfaction in living that noth-

ing else can give. He has a wellspring of life and joy and energy within him such as the man without an object in life can never possess. And as, day by day, he fosters it and moves toward it, by innumerable little steps, the attractiveness and the joy increase. He lives and he knows that he lives. His heart sings within him, not for what he has as yet in his possession, but for the movement, the progress toward that which is to him a light shining brighter and brighter.

Though he may have frequent disappointments and discomfitures, there is an undercurrent of satisfaction because he is in love with something, because his soul has found an outlet through which it streams forth in daily worship. And by worship and effort the man grows in strength of will and in power of achievement. He becomes a perfected instrument for the accomplishment of the end to which he has devoted his unswerving attention and passionate regard. This is what makes the world go round, not simply for the individual, but also for the great social and industrial organism in its totality. It is the worship of the ideal that fits men for their tasks, that keeps them to their tasks through weariness and self-denial, through watchings and fastings, through years of ingratitude and neglect and human cruelty.

Now, does not all this point to the belief that the future of evolution will have for its motive power, and perhaps essentially consist in, some

form of the worship of the ideal? We are warranted, I think, by the facts in making this assumption.

II

The next question then is, what are the antecedent probabilities as to the characteristics of this ideal? The experiences to which we have just given our attention indicate clearly what some of these *must* be. We have seen that there is an unmistakable gradation of ideals on a scale of value and efficiency. The essential quality of an ideal is not a matter that can be referred only to the taste of the individual. Unquestionably it has a value as related to the peculiarities of the individual and to the plane of evolution that he has reached at any given time. But it has also a distinct place on a scale of absolute values applicable to the human race as a whole. It is not, in this connection, necessary or desirable to try to make a list of all the qualities that should appear on such a scale. But, as regards the great process, there are certain vital characteristics which we must postulate as necessary to an ideal which can presume to be that of advancing evolution.

In the first place it must be *inexhaustible.* This one quality takes it out of the class of lesser ideals and puts it into a class by itself. Other ideals are finite; this one must be, as related to our powers of growth, infinite. These others,

that is, the forms in which they embody themselves, can be compassed, emptied of their seductions and left behind. This one, the supreme, can never be compassed nor left behind, for it is the ideal of ideals, *the* reality, of which all others are only the scattered rays. It is the source from which they have sprung and the end in which alone they can find the fulfilment of their prophecies. It must be inexhaustible, not simply as related to one faculty, one department of human aspiration; for this would mean, and does continually result in, abnormal development, be the specialty what it may. It must have such a fulness of content, such a potentiality as related to all the activities of the soul that each one shall find its progressive satisfaction and realization in it.

An ideal so related to the human mind can be nothing other than mind itself, — a supreme mind in which all and more than all the possibilities shadowed forth in human visions of perfection are not only existent, but always active and, like the great process itself, ever moving on.

If now we postulate, in response to these demands of our human experience, the reality of such a supreme being, are we thereby abandoning the region of fact for that of fancy? Are we trying to establish as an actuality that for which we can find no endorsement in past experience? On the contrary, we are simply focalizing attention upon one great class of facts in human history,

outlining the conclusions to which they point and offering a working hypothesis as to their place in the human scheme of things.

If this most important and significant factor fits into the place we have assigned it, if it is seen to be the keystone of the arch of human thought and experience, providing a foundation on which we may securely build heavenwards, it cannot be set aside. It has been established as all our other well-founded beliefs are established. Our approach to it has been tentative; it has been an exploration along the line of a special class of facts and a search for their complementary factor, somewhat as the astronomer searches for a star which ought to be found in a certain place in the heavens, or as a chemist describes some of the qualities of an element not yet discovered, from the requirements of classified facts in his possession. And if, at this point, we recall our vision from its speculative task, we see right before us, as an actuality, that which we have postulated.

The supreme ideal that we have described as necessary for the continued evolution of man is an existing thing in human experience. It is and has been through the ages a most potent factor in the evolution of the human mind. It has been the source of the most vital inspiration, the spring of desire, of effort, and, in the largest sense, of conduct. It has all the characteristics of our ideal, not only in the advanced form in which it exists to-day, but, more particularly

and essentially, in the history of its becoming. As we look back upon that history, the crude forms in which it existed during the childhood of the race may seem to have almost nothing in common with its maturer forms. But this is not peculiar to any one department of human ideas.

The world of our conceptions is an organized whole, every part of which is dependent upon the other parts. Each different one has in turn its day of expansion and growth, while others may be relatively at a standstill; and at such times it often seems to those who are specially interested in a growing department that these others have reached the limit of their usefulness and should, as encumbrances, be eliminated. But anon, these overshadowed departments of our organized belief come to their own. They, in their turn, are quickened and enter upon a growth of transformation and adjustment, fitting them to their place in the living and developing whole.

These different sources of our human thought cannot perish, or wholly disappear, because they are of the very essence of human nature. They spring each from a divine germinal instinct, an irrepressible principle making for growth and progressive realization.

The God-consciousness of the race has passed through as many phases as the race itself. In its earlier stages of development it does not appear as an ideal at all. It is the brooding sense of

an existence higher up on the scale of being, a personality more powerful than man; not one to be, in any true sense, worshipped, but rather one to be feared and propitiated. When, at a later stage, the conviction that this higher personality is beneficent, that He is one to be adored and loved, dawns, it is confined to a few individuals, the men of deeper insight and inspired imagination.

These, the prophets, declare what God is as revealed in their experience. They speak boldly with a "*thus saith the Lord,*" because they speak from experience and not from speculative or reasoned premises. Their words find a response in a select following, who recognize the voice of God speaking strongly and authoritatively through these inspired ones. They know the God of the prophets as the Very God Who has already worked in them, but hitherto only vaguely comprehended and timidly desired. Ages ago this thought of God as the supreme ideal entered into the world, ages ago it was proclaimed in no uncertain words. But, history all the way down is the record of men's unfitness to receive it. Men have ever seen in God a more or less magnified reflection of those in power among them. The arbitrariness and love of self-aggrandizement that have so often characterized their earthly rulers have been transferred to "Him who sitteth in the Heavens."

The ancient Hebrew liturgy, as we have it

in the Psalms, is a luminous illustration of the coexistence of diverse conceptions of God in the thoughts of a nation to which the reality of God was a foregone conclusion. In the Psalms we have a theology in the process of evolution. Antagonistic ideas of God are continually linked together, apparently without a thought that they are antagonistic. Love and pitiful mercy are coupled with revengeful cruelty. Grandeur of being, majesty of bearing in the works of nature, largeness of soul to the uttermost limit of human thought, are there, and at the same time the imputation of the human littleness of a soul that exults in satisfied anger and physical triumph over enemies.

The ideal is taking shape through much tribulation, holding its own, but not yet triumphing over the crudities of a lagging development. The higher thought stands out clear and full, with a grandeur and majesty, a depth and tenderness of expression that satisfy the most exacting demands of the soul, an expression that has furnished, for all time, the most exalted form of language for human worship. But, it is not till the advent of that messenger of God who embodied this spirit in a far higher degree, that we have the separation and exaltation of the finer conception and the unmistakable condemnation of the lower.

"Ye have heard that it hath been said by them of old time, thou shalt love thy neighbour and hate thine enemy. But I say unto you, love your

enemies, bless them that curse you . . . that you may be the children of your Father which is in Heaven."

This is the distinct setting up of an ideal. It is, indeed, but one aspect of that ideal, and it is expressed in language that seems to us hyperbole. But any effort to indicate the ideal in words must result in hyperbole, because, as related to human aspiration and effort it is, and must always continue to be, unattainable. Were it otherwise, the demands of evolution would not be met. "Be ye perfect even as your Heavenly Father is perfect" is the necessary expression of it. A fuller and more explicit one is given us in that wonderfully condensed formula which contains the quintessence of the old Jewish religion:

"THOU SHALT LOVE THE LORD THY GOD WITH ALL THY HEART AND WITH ALL THY MIND AND WITH ALL THY STRENGTH, AND THOU SHALT LOVE THY NEIGHBOUR AS THYSELF."

An appearance of impracticability attaches to both these formulas. They seem too high, too separate from the life that we experimentally know, to be heartily and honestly appropriated as achievable ends by any one. They appear to involve the absolute reversal of the motive principles of life, the suppression of its energizing factors. Life, as we know it, is full of devotion to passing interests, but these interests, though ephemeral, are all important to the life to which

they contribute. To eliminate them would be like removing all the organs through which the heart serves the body, for the purpose of giving it freer play.

But, this transcendent aspect of the ideal is really no practical bar to its acceptance, for its attachments to actuality are indicated very clearly in the context. The "Father in Heaven" Whom we are exhorted to resemble is identified with the God of nature. It is He that causeth His sun to shine on the evil and on the good and His rain to fall on the just and on the unjust. In other words, we are referred to the study of God, as He manifests Himself in the actual world, for an explanation of details and for the practical adjustment of our lives to them. Isolated from this practical setting, the great two-sided formula which expresses, at the same time, the rule and the ideal of life, seems to involve an insuperable contradiction.

The first clause of it is expressed in uncompromising absolute terms — "with *all* thy heart and with *all* thy mind and with *all* thy strength." But, the second clause at once limits and explains. It provides for and commands two streams of soul-energy which are to share the attention, the devotion, and the effort of the same soul that has been directed to concentrate everything on the thought of God. And these two streams of soul-energy are just those which, in the natural man, have worn deep channels: the love of self,

which, from the initial moment of consciousness, has been the moving power of evolution; and the love of our neighbour, which has been evolved and fostered and extended, from its beginnings in the ties of consanguinity, all through the course of social organization. These two are to have their full, equal share of the vital forces generated in every living soul of man.

Men have not lived through the Christian centuries under this formula without making a workable adjustment of its apparently divergent clauses to the conduct of current affairs. But they have, generally speaking, been able to live without understanding the principles of such adjustments, or legitimizing them in their moral judgments. The impossible ideal set up by the first great commandment has seemed more or less the censor of their devotion to various lesser ideals. Necessary though this latter devotion be, in the logic of events, its justification will, ever and anon, figure in the court of conscience as disloyalty to the highest ends of being.

To work out, from the standpoint of evolution, the true relation of the absolute ideal to the host of lesser subsidiary ideals is one of the great practical problems of a living theology.

CHAPTER XII

TWO FORMULAS

WE have now two formulas on our hands, both of which are said to be radically related to the conduct of human life and equally comprehensive in their bearing. "Work out your own salvation, it is God that worketh in you." "Thou shalt love the Lord thy God with all thy heart, and thy neighbour as thyself."

I

It is time for us to compare or, shall we say, contrast these two. Are they compatible with each other? Do they logically hang together? Can they practically work together? At first sight it might seem that these questions must be answered in the negative. Each of our two propositions has *in itself* a paradoxical look, to overcome which we have fallen back upon concrete experience. But when we bring the two together, for co-operation, the paradoxical and practically conflicting nature of the attempt looks almost insurmountable.

Are any two principles in the world more definitely opposed to each other than altruism and

egoism? Does not our first formula appeal essentially to the egoistic side of human nature and the second to the altruistic? How can a man make the working out of his own salvation the great purpose of his existence and at the same time aim consciously at an all-absorbing love to God as the end that must dominate all others? Is living for self the same as living for another? Can one have at the same time two supreme ends? Let us look carefully at this fundamental question.

One certainly cannot have two such ends if they are, in the nature of things, radically opposed to each other. But if, on the contrary, the two ends are antagonistic only in appearance, if in practice they may be made to serve each other, become complementary to each other, then the duality disappears in an essential unity. Sometimes one and sometimes the other of these two interests, figures as the supreme end, and alternately, as the means for attaining the end. In the evolution of the human mind we are familiar with such a transposition of means and ends. An activity which in its initial stage is entered upon, not for its own sake, but because it is believed to be tributary to some ulterior end, is, in its later stages, pursued quite for its own sake.

The beginnings of chemistry were not noble. They were not the outcome of a desire to advance science, but for the more homely, workaday motive of producing gold by a secret process.

Nevertheless chemistry, so cultivated, did advance science, and, as the field of its activities widened and its marvellous richness fired the imagination of its votaries, the original end vanished out of sight. Devotion to science became its own justification.

So with our apparently conflicting formulas. Our postulate is that the great end of existence for every intelligent, normal man is to work out his own salvation, — to so regulate his life, his thoughts, and his affections as to secure for himself the realization of the highest possibilities of his nature. Then comes the question how shall he work; by what methods? What principle has he to guide him? Where lies the road by which he is to travel? We have answered, That which he seeks is to be found only in the cultivation of a passion for something so exalted, so inexhaustible in its satisfactions, that it will continually lead him on to higher and still higher realizations of himself.

This brought us to our second formula, which figures as the means to the attainment of the above end, "Thou shalt love the Lord thy God with all thy mind and with all thy heart and with all thy strength." This is the relation of the two formulas at the outset; that is, during the initial stages of the higher evolution. But, as the process goes on, if love to God actually develops in the soul, if it widens and deepens and discloses to a man's consciousness the great-

ness of its satisfactions and possibilities, it progressively moves into the position of an end pursued for itself alone. The thought of working out one's own salvation is swallowed up in the flood of life that has entered every desolate place.

This, we may confidently believe, will be the fruitage. But at first our lives are passed mainly in the transitional stage. The end, never to be lost sight of, is for every man the working out of his own salvation. This is the course of nature. It is the repetition, on the highest plane, of the process which, on every plane, carries us from one stage to another of an ever-expanding life. There must be, first, the struggle for existence, then the struggle for the improvement of existence; then, as the outcome of this, the development of interests that serve, sometimes as ends, and sometimes as means to ends.

As to the *morality* of making personal salvation the aim of a life's striving, there is much to be said. The position that it is the necessary incentive and guide to a higher type of being will be challenged by some and repudiated, with righteous indignation, by others. Is not this the crude, narrow view of life that the highest morality has discredited as a disintegrating, soul-withering idea? Has not all social and moral progress been characterized by a growing altruism?

My position is, that however truly this may represent a much-approved phase of modern thought, it is a partial, one-sided, and therefore

injuriously false view of the situation. Living for others is distinctly *not* the object set before us as the great end of life either in the Christian formula or in any other formula save that of a very modern philosophy. It certainly is not inculcated by practical experience. The chief and overwhelmingly important object of every living soul is to work out as fully as may be its own destiny. This is the trust that has been specially committed to each one. It is the work for which the individual is responsible.

God Who has fashioned us and knows us through and through, our tendencies, our capabilities, our susceptibilities, does not make Himself responsible for our salvation. He has put that responsibility upon us. How much less can we, having no private latchkey to our neighbour's soul, able to approach him only from the outside, look with certainty for any definite results from our efforts to influence him in the working out of that salvation which is his business? Unquestionably it is our duty and our privilege, and one of the prime conditions of success in the working out of our own highest good, that we work for that of our neighbour also. But, so far as direct results are concerned, we are to the last degree uncertain of the outcome. We may, indeed, rest assured that our labours of love will bear some fruit, though it may not be of that particular kind on which we have set our hearts.

The missionary who succumbs to a deadly

climate, or to the violence of savages, before he has had time to speak a word has failed in the immediate object of his life, but the spirit that inspired him and those who sent him has enriched the world. But, even if there were no such residuum of good in the outside world, the results in the hero's own soul are of incalculable value for him. He, at all events, has been working out his own salvation in the effort to help work out that of others.

To see this matter rightly we must objectify the self we are working for. This soul, which I call mine, is a thing specially committed to my care. It is a thing of wonderful possibilities in the direction of happiness or misery; of nobility, beauty, harmony, on the one hand, and of degradation, deformity, and dreadful discord on the other. Can I present it to its Maker with its higher qualities developed as the outcome of my life, or shall I have to appear before Him in shame and self-reproach with nothing but a ruined instrument in my hands? As an object to live for, nothing can be more inspiring than this. It calls into play the planning, creative, artistic faculty. It generates the love that springs up and grows with the growth of any living thing that realizes itself under our fostering care.

Furthermore, an attempt to suppress self-interest as a prime factor in moral evolution is nothing less than undertaking a reform against nature. It proposes the elimination from the

great process of that principle which has hitherto been its mainspring. It is not simply an impossible undertaking, it is a vicious one. To set up altruism, or any other principle, as that which *ought* to be, as contrasted with devotion to self-interest as a something which *ought not* to be, is a most mischievous and morally depressing doctrine. Whatever the moral philosopher may say, the rejected principle of action will continue, by force of nature, to be the motive principle of the great volume of life, and to teach men that this is an unworthy, immoral principle is to put them in the position of moral outlaws. If they *intellectually* legitimize the doctrine of the altruist, they live in a perpetual self-stultification, habitually condemning themselves in that which they allow.

Reasoning thus from facts, from the relations which the great forces of human evolution have borne to each other in the past, I conclude that the frank, whole-hearted, courageous, joyous devotion of oneself to the working out of his own highest destiny is the grandest occupation for the soul of every human being. But now, let us observe, there is another side to all this. Important and irrepressible as is the principle of self-realization, it does not stand alone. It is but one of an organic group of principles, each one of which is equally important in the higher evolution and each one of which has emerged as a rudimentary instinct in the natural course of the great process.

Working by itself, without restraint from its

associates, the instinct of self-realization runs sometimes a riotous course to ruin, sometimes an apparently upward course to monomania and bitter frustration of its life object. Pure egoism is a form of insanity, and a cultivated egoism is sure to turn upon the subject of it. It is a well-attested fact of history that absolute, autocratic power carries with it the implications of insanity. The solitariness of the situation unseats the reason. Culture, for its own sake alone, brings up at the same goal,—ennui, self-reproach, hatred of that which was formerly delighted in, blank despair where there has been an outlook of ever-increasing happiness, the nakedness of poverty where there has seemed to be an inexhaustible store of wealth.

Tennyson, in the "Palace of Art," has given us a lurid, but perhaps not too lurid, picture of the tragedy of a soul that, with all the resources of the modern world at its command and endowed with all the capabilities of a highly strung organization, has sought self-realization with nothing other than self in view.

> Lest she should fail and perish utterly
> God, before whom ever lie bare
> The abysmal deeps of personality,
> Plagued her with sore despair.

All the high susceptibility of feeling, the keenness of perception, the nobler tastes and spiritual necessities engendered in this soul that has been

weaned from lower gratification to the highest that art and culture can give, join together to reproach, and torture its loneliness.

> And death and life she hated equally
> And nothing saw for her despair,
> But dreadful time, dreadful eternity,
> No comfort anywhere.

More apparent still is the evil and cruelty of this instinct, unrestrained, when we turn to its manifestations in the world of social relations. However fine, however impersonal the original conception of achievement may be, the realization of it in a militant world has a fatal tendency to debase it. What was, at the outset, a legitimate passion for self-improvement and self-expression gets transformed into a craving for recognition. The desire to *be* is supplanted by the desire to *appear*, the desire of dominating the imaginations of others, of commanding their praises. And out of this desire is developed that brood of unlovely and hateful things, jealousy, envy, cruelty. Many of the greatest evils of society owe their origin and their violence to the warring of rival contestants for self-realization. In any given age, the fashion of the world fixes the attention of many on the same prizes, and in all ages, the desire for wealth and power is a dominating passion of dominating souls. This means war. In the realm of finance, of politics, of social prestige, passions and cruelties are

engendered that are sometimes as essentially "hell" as that which declares itself on the battle-fields that are strewn with human bodies.

What then are the motives that shall prove strong enough to curb and transform into an angel of light this masterful, tyrannical instinct? We have said that, in its normality, this instinct is but one of an organic group of principles, each one of which is equally important in the higher evolution and each one of which has emerged as a rudimentary instinct in the natural course of the great process. We might go far afield to marshal these principles, for they manifest themselves in a variety of forms. But it is more to our purpose to devote attention strictly to the condensed statement of them given in our second formula. And the more we study that formula in relation to the realities of life and to the processes of becoming in human evolution, the more, I believe, we shall be impressed with its all-comprehensive grasp of the truth.

In the prosecution of this study it is desirable that we dissociate it as much as possible from its traditional implications of divine authority. This is not to separate it in thought from its connection with the inspired Teacher Who set the seal of His greatness upon it. We must, indeed, compare it with His other teachings to know what He meant by His endorsement of it. But when we have ascertained, so far as may be, what it meant to Him, it remains for us to make it ours by testing

it thoroughly as related to life's experiences. Does it fit in with the past of human thought and feeling? Is it capable of meeting satisfactorily the demands which the crying deficiencies of our incompleteness make upon it? Does it give us a true answer to the great questions which we are asking of evolution? Does it indicate the one and only line of normal development? Does it mark out clearly an end worthy of the life-effort and enthusiasm of every human soul?

II

"Thou shalt love the Lord thy God with all thy heart and with all thy soul and with all thy mind — thou shalt love thy neighbour as thyself." This is said to be two laws, and it is ordinarily thought of as such. But, as we have elsewhere pointed out, it is practically a threefold formula. And its second clause, prescribing, as it does, two streams of soul-energy that are diverse and often antagonistic to each other, obliges us to divide our attention to the study of each one separately.

The love of our neighbour is to be one of the great ends of life. The love of self is another, of equal importance with the first; and, because it is the first in the order of development, we must make it the starting-point of our investigation. It is here that we have the strongest attachments in reality. And *because* it is a principle of action fully mobilized and in actual possession of the situation at the outset, it is made the

gauge of that other principle that ought to be its peer. That which we know and practise is to be the measure of that which is as yet only partially known and practised: its measure not simply as to the volume of the attention and life-energy we bestow upon it, but also as regards its quality.

The standard of self-interest is, in every normal soul, continually changing. If we are in the true line of promotion we are progressively aiming at higher and more comprehensive ends, and the love of our neighbour must follow suit. Not that we are to presume that we and our neighbour will be always moving at the same pace, but that our increased apprehension of the possibilities and of the value of life will react upon the love of our neighbour, enlarging and carrying it to a higher degree of intensity.

This throws us back once more on the recognition of the fact that the progressive realization of self is a vital factor in the true life. That this was Our Lord's understanding of the second clause of our formula will be clearly seen by a comparison of the development of its two outlooks in His illustrative discourses. His parables give us truth in a concrete objective form which there is no mistaking. And in the twenty-fifth chapter of St. Matthew we have both sides of this moral equation so illustrated. Probably no two representations of the outcome of human life and of the standards by which its success, or failure, is

to be measured have more deeply impressed themselves upon men's imaginations, or more effectually influenced their lives, than that of the parable of the Talents, on the one hand, and that of the Final Judgment on the other.

Both these representations have to do with the results of life as a whole, and each one is put before us as if it constituted the sole test by which individual lives are to be judged. At the same time they are as diverse in their outlooks as they can well be, one having regard to what we have called self-realization, the other setting up human sympathy and helpfulness as if it were the sole test of a normal life. This latter has regard to the love of one's neighbour, the former has regard to the love of oneself.

The parable of the Talents carries us into life's conflicts, the battle-fields where men are wrestling for the mastery and where one man's gain frequently involves another's loss, and it seems not only to legitimize the struggle, but to make its prosecution the test of a faithful life. I say it *seems* so to do. And even where we rise above the literalness of the figure, we are still held to the interpretation that the development and increase of man's natural endowments are the great end of life. For the working out of his own salvation, in other words, every man must primarily aim at making the most of himself.

The allegory of the Final Judgment, on the other hand, makes everything hinge on the extent

to which men have given heed to and cultivated the natural promptings of sympathy. Their pitying love has gone out to the unfortunate, to the hungry, to the captive, to the sick. What an absolutely different career from that outlined in the narrative of the servant who, entering into life's conflicts, made his five talents into ten! The conscious aim in the one case is helpfulness to others, the conscious aim in the other is the realization of oneself. It is unnecessary to point out that these two representations were not regarded by their Author as the contradiction of each other. We have only to refer back to His formula, "love thy neighbour as thyself," or, what is equally important, "love thyself as thy neighbour," to recognize the fact that these were to Him the two faces of a composite reality, an organic truth which we are to work out into a concrete, objective experience.

Turning now from the teachings of Jesus to the teachings of nature, we find the fullest endorsement of the equality of these two principles. Altruism, the love of our neighbour, is, generally speaking, the softer, the less established, and, as a rule, the weaker when the two clash. It therefore demands more of our attention than the other. It must be protected from the encroachments of selfism. We have to think for it, plan for it, foster and nourish it. But it is equally important that we do not let the cultivation of the one obstruct the full and vigorous action of the other. It is

the office of the later in development to modify and to elevate, not to weaken, the earlier.

Now let us take a look at this word *equality*, which we have used to characterize the relations in which the two principles stand to each other. We have seen in another connection how fatally easy it is to confuse ourselves by using conceptions generated in one realm of thought for the explication of relations generated in a totally different one.

If we permit the word *equality*, in this connection, to bring before us ideas of mechanical force, or even of degrees of authority, prestige, and the like, we can reduce this claim to an absurdity. It becomes a mere matter of words quite out of connection with the world of facts. Experience shows these two principles associated indeed, but not as yet perfectly adjusted to each other. Their limits of jurisdiction are not definitely marked out. They are, now and again, meeting face to face on narrow roads, where one or the other is obliged to give way, and which of the two yield must be decided by the circumstances of each particular case. The *best* life is a matter of adjustments, of yielding here, of insisting there, in deference to the good of the personality and of society as a whole. In other words, the only equality between altruism and selfism is that which pertains to the parts of an organism.

From a more comprehensive point of view they

are seen to be not antagonistic, but mutually supporting factors in a living unity. Each sustains and promotes the growth and health of the other; they also limit, control, restrain each other. They are to each other what the heart in a human body is as related to the organs of digestion, or what the nervous system is as related to these and to the muscular system. The welfare of the whole and of each one is determined by the normal balance which is maintained by their collective action.

We are familiar with the antagonisms that develop themselves in our physical members. The unity of the body is, as we know, made up of many departments of operation and government in which there is great diversity, — the muscular system, the nutritive system, the generative system, that which governs the circulation of the blood, and that which regulates our breathing, — and each one of these has its own special centre in the nervous system, which, apparently from some higher centre, co-ordinates and administers the whole as a balanced organism.

This wonderful complex of organs and activities comes to us with all its parts so perfectly adjusted to each other that, under normal conditions, we know nothing of its working. Each department performs its functions silently and rhythmically. We are like passengers on a perfectly appointed steamer, blissfully ignorant of machinery and navigation, and with but little understanding of the dangers that beset us.

But there is no rigidity about this apparently perfect order. On the contrary it is characterized by great elasticity and variability of adaptation. It is like a musical instrument that can be played upon with results ranging from discord and vulgarity to the most sublime reaches of emotion and thought. At a very early stage of our experience we discover that the natural and seemingly perfect adjustments, that have come to us, have to be modified, and further, that some of these modifications are strenuously resisted by the old order. Antagonisms are developed. The nervous system, through which the demands of the governing ego are made, finds difficulty with its subordinates. Extra and unusual labour is laid upon them, and restraints, under which they chafe. The distinctly animal departments clamour, more or less insistently, for liberty of action; and the result is sometimes a devastating insurrection.

Out of such experiences, many times repeated, there grows up a definite and persistent recognition of a duality of interests in our physical constitutions; and the governing personality is importuned to encourage the one or the other, to the discomfiture of its rival. The libertine sides with one faction in the development of his animal nature; the ascetic with the other, in the hope of developing his higher impulses by the suppression of the lower. The result in both cases is abnormal and, if persisted in, ruinous. Experience discloses to us a law written in our members.

Thou shalt regard and honour and normally develop all the departments of that wonderfully organized human body that thou hast inherited. Thou canst not destroy nor degrade one part, without prejudice to the whole. That whole, with all its parts, is the outcome of an intelligence higher and deeper and broader than thine. Study and take counsel of it.

The antagonisms that have been developed are very real, they cannot be ignored. But if we magnify these to the obscuring of the unity of the interests to which all are tributary, we are mistaking a side issue for the central and vital truth. It is not otherwise when we are confronted with the claims of selfism and altruism. When these latter are urged upon us from the standpoint of an external "thou shalt," the dominating aspect of the situation is that of antagonism, and we may be inclined to look upon altruism as an upstart principle of action that has hitherto been associated with self-government in a purely subordinate position; that has existed in its household, as it were, on sufferance, without authority, without determining influence, the companion and solace of our gentler moods, but one never allowed to interfere with matters of moment.

Where battles have had to be fought — and life has been a series of battles — love to one's neighbour has been left at home. Life is a stern business; altruism is weak-hearted: success means triumph over opposition; altruism is concession

and surrender. Each is the contradiction of the other; to try to establish them as equals in self-government is suicidal. The vital forces that have hitherto been directed successfully against foreign enemies are now to be occupied in domestic warfare. The new principle neutralizes every effort of the old. Progress is brought to a standstill, and the man who tries to live by such a formula is like one struggling in a quicksand. Every movement makes his situation more hopeless.

This is, as I have said, the view of the case that haunts us when we think of our formula as a mandate from an external source, ordering us to revolutionize all our experience of life's possibilities. But, it is as far removed from the correct view as an attack of hysterical alarm is from a judicial opinion. It is our inveterate habit to measure, at the outset, new principles of action, or the readjustment of old principles, by conjuring up visions of their extreme application. The conservative instinct of self-protection scents danger, and presents the case wholly in the light of its difficulties, ignoring the fact that all progressive change involves difficulties and the overcoming of them.

The antagonism between the two principles is nothing like that presented to our imaginations; nor is the affirmed subordination of altruism correctly stated. Altruism is a basic principle of life, and one which far down in the tribes below man has exerted a determining and momentous

influence. The fact that it has been quieter, less obtrusive, and more restricted in its influence is not to the purpose. The influence has been there, deep set in human nature, and powerful. It has been the theme of poetry and art, the moving principle of the noblest heroics in every age, and under modern conditions it is the source of all our higher enthusiasms.

Under civilization it has become organized and conventionalized, run, as it were, into moulds. And through this conventionalizing it has been transformed. It has taken on the appearance of a modified self-interest. The whole social order is a complex of adjustment by means of which we serve our neighbour in serving ourselves. It is next to impossible for us to engage in any healthful activity, beneficial to ourselves, that is not in some way helpful to others. And all this organization of interests has been gradually built up by man's ingenuity, advancing under the guidance of a higher intelligence. Like the human body, it moves, for the most part, on its accustomed ways without attracting our attention. We have been born into it, we are formed and fitted to it. Our duties and our privileges lie, for the most part, within its sphere. We can serve our neighbour more effectually, and in the long run more acceptably, by working through the order of its adjustments than in any other way.

But, as in the case of the physical organism, there is no rigidity about this order. It gives

play to great freedom of choice for those who occupy positions of more or less power, and for all, as regards the spirit in which life is lived under it. Like the human body, its provisions can be distorted from their normal functioning, they can be prostituted to base uses, made to serve the ends of personal greed and cruelty, and, on the other hand, they can be raised to a higher efficiency and more harmonious action. Though so intricate and highly organized, the social order into which we are born is, in no wise, a completed one. It works, but it works lamely. We accomplish great things by its instrumentality, but the vision of a better, more universally beneficent order, engenders a wholesome dissatisfaction with that which has been hitherto achieved.

Yet we must provisionally accept that which is, and make the best of it. Unless we go into seclusion we must become accomplices in much that we deplore. The acceptance of the latter alternative is the lesser of two evils; for if good men isolate themselves from the heat and conflict of the world because of the wickedness of its organized working, the world is not thereby made better. The only possibility of improvement is through the energizing of the good element, the increase of the volume of honourable, determined, intense living on the part of those who love that which is right and true. The character of a civilization or a community is expressed neither by its laws nor by its proclamations, but by the

use or abuse, on the part of its members, of the liberty that its legal system permits.

Every man who forms plans, or pursues ends, under such a system, does something to give tone and character to it. If he plan and work in harmony with its spirit, keeping always in his heart the principles of fair dealing, restraining *himself* where the law does not coerce him, he helps to make the social order that which the laws of the land aim at in their provisions. But if, on the other hand, he scheme and plot to make the laws which protect his interests the instruments for invading the interests of others, diverting into private channels the forces intended to secure the good of all, he is helping to make the social order an organized power for oppression and robbery. To work worthily and uprightly within the established order must therefore, it seems to me, be the first aim of one who submits himself to our formula.

The second flows as a corollary from the first. Because the social order is an agency of such vital importance, and because the creation and elaboration of it has been, and must be, largely the work of man, every intelligent member of society is constrained, by the love of his neighbour, to keep himself vitally and helpfully, if may be, in sympathy with efforts toward its improvement. It is a foregone conclusion that many of these will prove to be failures. In the social as well as in the individual life we live and prosper by making

experiments. They are often costly, and it must be our study, by circumscribing their area, to make them as little so as possible. But to ignore the imperfections of our social system, to maintain an attitude of indifference toward the hardships that its working involves, is not consistent with love to one's neighbour.

And again, outside the framework of the established order, there has sprung up an extensive and important environment, that of voluntary, philanthropic endeavour. Whatever may be said in disparagement of our modern civilization, the existence of this organized love to one's neighbour is a standing and ever-increasing evidence of the vitality of the principle of which it is the outcome. However numerous the mistakes and however serious the blunders that may have characterized its development, the spirit that animates it is of incalculable value, and no soul of man that works sympathetically with it can fail of a rich reward.

Again, auxiliary to these organized forms is the immediate, personal service that we may, in a variety of ways, be able to render to those who have been worsted in life's battles. All kinds of relief or rescue work are, as related to the great volume of organized life, side issues; but, as related to the individual, they are matters of prime importance. They are a supplementary work, an attempted mitigation of the evils of the social mechanism, the binding up of wounds incurred in its battles, caring for the victims with which its

way is strewn. But they are of prime importance to the individual because, without some participation in them, the best part of one's own soul is in danger of becoming atrophied.

I think we may assume these considerations to be sufficient to establish the position that love to one's neighbour is organically the correlative of love to oneself; that, for the highest results, the two must work together, mutually inspiring, sustaining, restraining each other. But how to bring about the harmony of working necessary for such results is the question.

The principle that represents self is strongly entrenched in the habit of generations. It is an aggressive, dominating force that in the course of nature overrides all obstacles. The principle that stands for love to one's neighbour, though a well-defined and, under favorable conditions, a powerful instinct, has not in itself the strength to hold its own when brought into conflict with its rival. The social organism moreover, though in many ways helpful and indispensable, is, at the same time, the source of the most intense rivalries and antagonisms. It brings men together, makes them helpful and necessary to each other, and at the same time sets them in such opposition as to engender deep-seated hatred. From the same source flow kindly relations and diabolical passions.

Civilization, while it articulates and unifies human life, at the same time differentiates and

separates. Classes become estranged from each other. The sweet natural sympathy of a common life becomes soured and, like a poison in the blood, engenders disease in the place of health. Organically related and indispensable to each other as altruism and selfism are, therefore, we cannot look to them to work out by themselves the problem of their normal adjustment.

This is just where the major clause of the Christian formula justifies itself. It is the keystone of the arch that binds together and makes mutually supporting tendencies, otherwise antagonistic. It is a mandate not from an external source, but one that is rooted in our constitutions. It is elemental in human nature because that nature shares the divine. It is a command of the great intelligence and love that far transcends humanity, and yet dwells in every human soul. It is the voice of our better selves and, at the same time, the voice of God. There is no unnaturalness about it other than the unnaturalness that may be predicated of every higher principle that has emerged in the process of evolution. It involves no antagonism to the principle of love to oneself and one's neighbour except that which characterizes the complementary forces of an organism. It is the outcome of an instinct without which human life would be but a lame, inconsequent, abortive episode, but with the recognition of which, vistas deep and wide disclose possibilities of infinite meaning and value.

Immediately we focalize life from the standpoint of this principle, all its parts undergo a radical transformation. Nothing remains the same because everything, as related to this principle, has taken on a higher significance. The most ordinary tasks of life are glorified by it. The most hopeless antagonisms are reconciled in it. In its light the love of one's neighbour, coincidently with the love of oneself, are seen to be converging lines pointing to a perfect reconciliation. As related to the love of God they are seen to be one. They attain to an absolute union and solidarity in the Being from Whom both have sprung. If, assuming tentatively the position of one in whom love to God has become a supreme, controlling principle, we may imagine ourselves to have achieved the state of existence which this point of view reveals, the problem is seen to be solved. The world, the great process, is no longer a riddle. We have, at least, *conceived* an end worthy of all the ages.

This, it may be said, is building castles in the air. But, every attempt to look into the future, to provisionally construct that-which-is-to-be, for the guidance of our conduct, is of the nature of castle building. The important question is, Do we build wisely? Is that which we conceive as desirable likely to be realized as the actual?

CHAPTER XIII

EXPERIENCE AND WILL

WE have outlined a theory of the knowledge of God, and have claimed validity for it on the ground that it has been thoroughly tested and amply verified in experience. But it may fairly be asked: in whose experience? Before venturing a direct answer to this question, let us glance for a moment at the analogous case of science, of that which we provisionally call *established* science. By whose experiences and judgments have the conclusions of science been established? Not by that of all men, nor by that of the generality of men, but by that of a small group, or groups, of men who have addressed themselves with absorbing devotion to working out, in different departments, the problems of science.

To the conclusions reached by the concurrent judgment of these experts the rest of the world defers; that is to say, the intelligent part of it. It is content to accept and, more or less, to live by these conclusions. Not that they are accepted as final; the assent given to them is always provisional. The scientific deliverances of to-day may not be, in all respects, those of to-morrow. Neither

are these conclusions accepted in all their details. The body of science which we may reasonably regard as established, fringes off in every direction into hypotheses, surmises, guesses, and prophesies which win the interest, or approval, of individuals, in various degrees.

Do we feel any less confidence in the conclusions of science because they do not appeal to us as finalities? On the contrary, although we may not be in a position to question the validity of the agreements of the men of science, our common-sense distrusts them most when they take on the tone of finality and absoluteness, when they tell us that, in this, or that, direction, they have touched bottom, that there are no realities unfathomable by their methods, and that all reality must conform to the physical laws which they have formulated. We feel the greatest confidence in them when we know that they recognize their limitations.

More than this, it is true that the characteristics of openness, incompleteness, progressiveness, constitute the greatest value of science to human thought. The scientific spirit is of more vital importance than the whole body of scientific achievement. The conviction that the world of man is growing, daily expanding and deepening, revealing new vistas for exploration, new possibilities of realization — this is the secret, the motive power that generates the energy and the enthusiasm of all modernism. It is this that gives zest to life even in the midst of weariness,

that makes the future glow with expectancy though the present be discouraging.

The criticisms so often aimed at the materialism of the modern world and the comparisons made between it and times of less progressive thoughtfulness, to the disparagement of the former, have no truth in them except as related to surface manifestations. Those more conservative ages of reflection had their charm to those who lived in them; their outlooks upon life, though limited, were often very beautiful, and they have a much enhanced charm for us who look back to them from the hurry and changefulness of our day, but, as compared with the present, those ages were only half alive.

Now let us turn back to the question of religious experience. Of whose experience were we speaking when we were advocating its use as the foundation of religious belief? Essentially and potentially of the experience of every normal individual of the human race. Primarily and actually of the experience of the religiously advanced members of it. It is the experience of those who have, as in science, addressed themselves with absorbing devotion to *working out* the problems of religion. Let me call attention to the difference, wide as eternity, between this kind of foundation and that offered by a church claiming divine authority. Up to a certain point, as Cardinal Newman has shown, the analogy between the authoritative Church of Rome and

the body of men eminent in science holds, and the argument that, as we defer to the conclusions reached by the concurrent judgment of scientific experts, so we ought to defer to the deliverances of the Church, seems valid. As we accept results, the reasons for which we cannot understand, from the one, so ought we to accept them from the other.

There could not be a greater fallacy. We have already noted that the assent given to the deliverances of scientific men is of a radically different kind from that demanded by the authority of the Church. It is only a provisional, tentative assent that is asked for, or given, to the conclusions of science. It is an absolute, final assent involving the suppression of all individual criticism that is demanded by the Church. But this only scratches the surface of the difference. Underneath the *kind* of assent asked for, lies the method by which the beliefs to which adhesion is asked have been reached. That of the Church commands our acceptance on the ground that its doctrines emanate from a source altogether distinct from that to which we must trace the common-sense wisdom by which we live. It is, in fact, the reverse of the method which obtains in ordinary, practical affairs. In the one case the beliefs have been communicated directly, in all their completeness and absoluteness, from an infallible, authoritative source; in the other they have been worked out, laboured for, reached,

after much travail of research and experiment, and as the outcome of many failures.

The one is claimed to be divine wisdom miraculously imparted, the truth of an omniscient, all-wise mind, that must take precedence over every other kind of truth, superseding and extinguishing it, if not agreeable to it. The other is human wisdom, wisdom in the making, incomplete, inadequate, imperfect, looking ever to the future for its enlargement and correction.

The inductive theology, which we advocate, abolishes altogether this antagonism, this theory of two sources of wisdom, two methods of acquiring it. It finds but one kind of wisdom emanating from one source; that is, the co-operative working of the human and the divine. The practical wisdom of everyday life, the scientific wisdom of those who have devoted themselves to the discovery of nature's secrets, the religious wisdom of those who have given themselves to the study of life's higher problems — all these are on the same footing as regards source and method, and each, in its own sphere, has a like claim to our allegiance. Each of them has a divine element, each has a human element. Each one, in its own way, is a revelation of God and also a revelation of man and, all taken together, they illustrate how God is related to man and what dispositions man should cultivate toward God.

With such an understanding we have the same foundation for a free-working theology that we

have for a free-working science, and we have the same reason to anticipate the building up of a body of stable belief in the one department as in the other. With such a theology there is no foundation whatever for the assumption that, in the absence of an authoritative church, all religion must tend to pure individualism and disintegration. There is no such necessity in the nature of things. In religion, as in other things, "wisdom is justified of her children." There will always be dissent and cavilling, because there is always a multitude of people about us who know not their right hand from their left in these matters. But there will also be a strong, vigorous, growing body of belief for the guidance and encouragement of the seekers after God. Nor need we confine ourselves to the future tense in speaking of these things.

The future is more exhilarating with its promise of better things to come, but it is permitted to speak also of the present and find in it abundant assurance. The process of theological and religious transformation in the midst of which we live necessarily involves the tearing down of much that was held sacred in other days; and destruction on a large scale always arrests and holds the attention of the multitude far more than the opposite process of building up. The former is effected rapidly, it is spectacular, startling, and, if brought about in the way of warfare, with varying episodes of rally and retreat, it adds to its tragic interest

that of partisanship. The process of reconstruction, on the other hand, is slow, tentative, for the most part, attracting little attention; it is accompanied by failures and temporary set-backs, and often discredited by work that has to be done over again.

But spite of all hindrances the re-formation of doctrine is well on the way to general recognition. While attention has been held spellbound by the destruction wrought in the old structures, it has been quietly maturing strength. It has not been the work of conventions nor of councils. It has been sparingly recognized in high places; nor will it ever have the stamp of finality and infallibility. It has been elaborated, in travail of soul, by individuals and communities. It has been the natural growth of the human spirit bursting the fetters by which it has been bound for centuries, slowly and painfully becoming aware of the vital forces pulsating within it and awakening to the consciousness of the glorious possibilities of a new-found liberty. And nothing is farther from the truth than the frequently made charge that all this new constructive effort is divergent. It presents us, indeed, with a variety of aspects, it is accompanied by erratic movements; but it is also characterized by an underlying unity of principle and motive. This, its positive side, is the only one worth attention; the other aspects are of passing significance, the chips that fly from the hewing of grand building material.

We may say of our modern civilization that it goes on wheels. But all wheels are not the same kind of wheels. There are the wheels of ox-carts and the wheels of baby-wagons, wheels of motor-cars that rush us over the earth's surface, and wheels in our pockets that mark the time they take to do it in, great driving-wheels that run the complex machinery of a factory and smaller wheels that are moved by it. But, with all this multiplicity of wheels, differing from each other, there is *one* wheel-principle. Each kind does its own work in its own way, but in every case it is the work of a wheel, whether it be that of a locomotive or that of a pulley.

So it is with the great elemental truths of religion. They admit of many forms of statement and of application, — varying and progressive adjustments; but in every case this variety emanates from a unity that admits of the most categorical authoritative statement. There is no uncertainty about this, there is no possibility of evasion. It is absolute in its finality. It represents necessity. It is the one and only principle leading to progressive well-being. "This do, and thou shalt live."

Thus, the great Christian formula is expressed in the terms of an uncompromising mandate, *Thou shalt.* It is the *law.* Not simply the Jewish law, nor its digest, but the essential all-comprehensive law of our being. And when it is complied with, when it is converted from the

general into the particular, realized in the actual experience of the individual, it transforms all those differences of view, which from the outside look so divergent, into varying expressions of an essential oneness of spirit, — into that most efficient kind of unity that is grounded in identity of desire, of aspiration, of enthusiasm.

But it is just here that many find an insuperable difficulty. The way of life is seen to be not only narrow and difficult, but its gate locked and bolted against the generality of men. Can love, it is asked, be called into being by the will? Does not love cease to be love if it is not spontaneous? To many the thought of an achieved love is a profanation of sacred things.

There has certainly been much in our education to foster such a sentiment. Because love is so beautiful, so life-giving, so transforming and sustaining in its influences, we have abstracted it, personified and idealized it. It is a mysterious something, outside and superior to us, that comes unbidden and takes possession of us, a something sacred that we are not at liberty to control nor oppose. In poetry, in romantic stories, in the drama, this view of love has been continually set before us, and to a certain extent we have honoured it; but in practical life we, for the most part, protest against it. It is not *all* a lie. But in its unqualified form it is a most pernicious and demoralizing lie.

It is a strange delusion that love, the most

precious, the most powerful, the great saving agency of the world, is one over which we have no control. Not that, in this respect, it constitutes a category by itself. Faith, which is the condition of it, has shared its segregation. When our late leader in psychology gave us, a few years ago, an essay entitled, "The Will to Believe," there was a great outcry on the part of many. The idea that a man's beliefs can be, and ought to be, regulated, to a great extent, by his will was denounced as immoral. Such a view, it was affirmed, carried within it the seeds of insincerity and constructive hypocrisy.

Now, is there to be found in experience any good reason for isolating these two, faith and love, from all the other activities of the soul? We are not slow to recognize the part which our wills play as regards these others. The very foundation of our conception of ourselves as responsible beings rests upon the recognition of the fact that we, to a great degree, make ourselves what we are, that we are free to cultivate *habits* that collectively constitute character. To live aright, to work wisely for our own salvation, is to give the strength of our lives to the formation of habits. The highest possibilities of being, toward the realization of which we press, are habits.

We cultivate the habit of courage, not only because it is necessary for success in life's conflicts, but, because without it no man can feel himself to be a man. We cultivate fear also, lest courage

should degenerate into rashness. We cultivate enthusiasm because, in its absence, we find no joy in the tasks we have set for ourselves. We cultivate patience because enthusiasm, by itself, overshoots the mark, tends to aggressiveness and intolerance, becomes transformed into bitterness and discouragement. We cultivate sensitiveness in order that we may understand the finer meanings of life. We cultivate indifference to defend ourselves not only against its coarser solicitations, but also its false and foolish refinements. We cultivate the social spirit that we may not be estranged from our fellowmen. We cultivate the power of living a life apart from society lest all our energy should run to waste in its trivialities. We cultivate generosity and we cultivate thrift. We cultivate industry, endurance, forbearance. We cultivate, in the largest sense, wisdom.

When we come to the formation of specific aptitudes, it is the same. We become proficients in no branch of art or science, experts in no profession except by intelligently directed will power, — by cultivation, training, discipline. We begin with nothing, or next to nothing, — a little mother-wit, a predilection or hint of fitness for this or that pursuit; the rest is done by faithful attention and effort, so far as we are concerned, and by the creative spirit of God working with us in response to our prayers of endeavour.

Now, while we recognize this as the order of

becoming, in all that makes for self-realization in life's utilities, must we settle down to the conviction that the most efficient, most dominating qualities of the soul belong to a sphere that is outside our influence? — that we have no control over those master-powers by means of which, alone, all the other more or less conflicting aims of life can be co-ordinated, organized, and made to work for one great end? If so, let us count human life a progressive futility, and man a moral invertebrate.

If we have not the power to shape our convictions, if we cannot, by the exercise of the will, determine and temper them for action, then the increase of intelligence makes us increasingly helpless. The more we know, the worse off we are. For the extension of knowledge continually opens new aspects of things. With a small amount of knowledge it was possible for us to come to definite conclusions and give ourselves with whole-heartedness to acting upon them. But, with the ability to look on the other side of this, that, and the other question, come the divided mind, hesitation, inaction, and a growing paralysis of the executive faculty. Every man of affairs knows this well enough, and owes all his successes to acting upon it. It is a commonplace of experience that a man who cannot *make up* his mind arrives nowhere. And it is quite as necessary that minds be *made up* in the realm of spiritual beliefs as in that of secular affairs.

It is not a matter of suppressing our honest convictions in the one case any more than in the other. It is our duty to receive and weigh all the evidence and all the inducements that present themselves, and if, when all has been said and done, the two sides seem to be evenly balanced, we have to decide by sheer force of will, and fight it out on that line.

As matter of fact, this evenness of balance is a hypothetical rather than an actual situation except as regards unimportant issues, those in which one way is just about as good as another. In problems of greater moment, when we have been hopelessly befogged in our efforts to solve them on their own merits, there are usually larger considerations that help to clear the atmosphere. The appeal to these is like that to a higher court, and it is just here that our method can be applied most effectively. The issues brought before this higher court relate to the practical effects of a decision upon the individual and upon society. Of two antagonistic propositions, does the adoption of one promise better results in actual life than the other? Does the one give courage and strength to men in the midst of life's warfare? Does the other tend to apathy and demoralization?

The problems of theology are specially in point here. Take, for instance, those two that stand at the head of the list. Is there a benevolent God working with man in the affairs of the world?

May the career of the individual life be continued after the dissolution of the body? A formidable array of arguments may be brought for a negative answer to both of these questions, some of them grounded in actual experience. Equally weighty considerations may be urged for an affirmative answer. And looking, now on this side and now on that, it may seem that no decision is possible. Shall we then rest the case here and content ourselves with the ineptitude of Agnosticism? Or, recognizing that no answer to these great questions is practically a negative answer, shall we set ourselves to determine what resultants are likely to flow from a negative and what from a positive answer? If we adopt this latter course we make an appeal from logic to life.

We seek enlightenment as to the good and the bad, the true and the false in spiritual beliefs from the same instructors that have taught us and our ancestors to distinguish between foods and poisons, between normal tissue and gangrene, between the air that gives life and vigour when we breathe it and that which depresses and corrupts the system. We have learned what kind of convictions it is well to encourage and what to eradicate, as a farmer knows, through his own and inherited experience, the difference between remunerative crops and weeds, the difference between soil that will yield him nothing and that which will respond to the labour he bestows upon it. As, in the one set of relations, experience has

guided us to a wise selection of means for the promotion of physical well-being, so in the other set of relations, experience must be trusted to guide us to a reliable choice of the beliefs that will sustain and advance our spiritual welfare.

If, as regards the two great questions above noted, it appears that an affirmative answer works for the encouragement of all that is good in life, if it makes men strong, earnest, self-controlled, if it meets the great desideratum by giving something that is in every way worth living for, if it is an answer that, in its comprehensiveness, takes up all other beliefs and ends, co-ordinates, unifies, combines them all in organic efficiency, if its employment receives the endorsement of those vital impulses that we instinctively recognize as the noblest and most authoritative, giving us the unreasoned conviction that we are moving in the right direction; while, on the other hand, a negative answer brings no helpfulness in its train, no outlook into a future of spiritual realization to nerve us for the conflicts of the present, no lighting up of the great world-process, nothing to hope for beyond the disappointing things of our mundane life, nothing to be loyal to, nothing of that joy that comes from the consciousness of movement toward something better, the divine sense of expectation, that makes present trials and sacrifices seem light, if, in our own experience and in the lives of others, its fruits are in the long run indifference, apathy, cynicism — then, the will must

decide for the affirmative and see that its judgment is made effectual.

It is the contention of our method that such an appeal is legitimate, and not only so, but that the decisions thus reached are things not to be laid on the shelf for academic use, but things to live by. They are of momentous importance. Having reached this point, a mere formal assent is criminal neglect of duty and opportunity. We are bound to give the whole strength of our adhesion and the whole volume of our loyalty to them. We must become partisans and in dead earnest, for these are matters of spiritual life and death.

The will must take control of the situation and rule with a masterful sway. It can do this, through its two strong arms of attention and inhibition. A man's responsibility centres very much in the use which he makes of these two faculties. Their strength varies in different individuals all the way from zero to almost absolute sway. They are the muscles of the soul, that may be trained to moral athleticism by judicious use, or relaxed and devitalized by neglect. Happy is he who, when the critical moment for action has arrived, has a well-trained will at his command.

The time for discussion has passed. There is to be no more looking on this side and on that. There is, henceforth, but one set of arguments to be considered. As regards these two vital questions, everything that is affirmative is to have its full

and unqualified weight. The will converts intelligence, for its uses, into a bull's-eye lantern, concentrating all its rays upon the truths that its authority has established; and it brings to bear upon any hostile considerations that would force themselves into the light, its grand and saving power of inhibition, — the power that pounces upon unlawful intruders and pitches them out, neck and heels. At this stage the only sane answer to all negation is, "Get thee behind me, Satan."

Not that we have reached a point beyond which there is no further growth. We have only just begun. Both these beliefs, — the affirmation of God and of the future life, — are living roots that must be cultivated; they have within them the potency of eternal life, there is no limit to their growth, nor to the variety of the fruits they may be made to produce in different lives. But, in all soils they must be nourished and protected by the will that has planted them. And here let us make sure that we apprehend clearly another aspect of the situation which, while it belongs altogether to the sphere of modern thought, is at the same time vital.

All the deductions from experience that we have just reviewed, as conducive to spiritual well-being, have to do with purely human relations. They are, in other words, adjustments to specific requirements of the human organism. Granting, therefore, all that has been said of their trust-

worthiness and practical helpfulness, how are we justified in advancing from this position to the assumption that these same relations are a guide to any reality that is outside and independent of them?

I answer that, in evolution, the revelation of all reality as one great world-process moving toward constructions of higher and still higher values, we have a most instructive and sufficient warrant for the assumption that, when we have discovered that which makes for its furtherance in the line of highest achievement, we have grasped something which we may safely hold to be an independent reality.

In the earlier stages of our argument we were constrained to regard man as the latest, most highly evolved factor in the great drama of progressive organization; and we were able, still further, to narrow the issue by fixing upon certain phases of human development as constituting the vital principle of its future. When, therefore, we have determined the conditions that conduce to the prosperity, the growth, and the health of those qualities of humanity that are not only the highest on the scale, but which explain, co-ordinate, and govern all the others, the whole great process of the ages flows in an irresistible volume to turn the wheels of our argument. In determining the status of the one factor, man, we have laid bare the secret of secrets, the reality and the meaning of the world.

But, we must return to the consideration of the first and great commandment, "*Thou shalt love.*" All that has been said, as to the functions of the will in the establishment and mobilization of faith, applies equally to love. But, we cannot rest the matter there. Love is a far more illusive word than faith. For, while it connotes the highest activities of the soul, it also stands for some which are near the other end of the scale. A more extended and discreet study, therefore, of the relations of will-power to love will be essayed in the next chapter.

CHAPTER XIV

LIFE'S LESSER ENTHUSIASMS

"God gives us love. Something to love
He lends us; but when love is grown
To ripeness, that on which it throve
Falls off, and love is left alone."

I

THE word *love* has as many significations as there are objects to which it may be applied and, again, as many as there are individuals to make application of it. To give a definition of it is impossible. No description can do more than point out characteristics of some of its particular manifestations. In the last resort it is known to us as an elemental factor in evolution. As we trace it back to its simplest forms, we cannot stop when we reach what seems to us the limits of conscious life. Its basic principle is operative throughout organic nature. Chemical affinity as well as the phenomena of magnetism and crystallization afford us the most striking analogues of that wonderful element which, even in the most highly evolved ranges of being, still persists as an instinctive, non-rational principle of action.

Not that it persists in this form alone. Its instinctive characteristics have been profoundly modified by intelligence. There is an unreasoning, mysterious element in every kind of love, but there is also, and increasingly, an intelligent side to it. We still love more or less blindly, but ever, more and more, our eyes are opened to understand *why* we love, and with this illumination comes also the knowledge and the ability to direct, regulate, and turn to the best account that elemental power which nature generates for us.

Another, hardly less conspicuous and profoundly modifying effect of intelligence, is the multiplication of the outlets of love and of the objects on which it expends itself. In the simplicity of primitive life, love finds only a few well-worn grooves in which to run. The old, old story repeats itself with varying incidents and intensity through the ages. The love of parent for child and that of offspring for parent broaden out into devotion to the head of the tribe. There is, further, the love of the chase and of war, of the favorite horse and dog, of weapons and ornaments, of the fetish and of the consecrated hearth. The volume and intensity of the love that so satisfies itself may vary greatly, but there is almost no lateral expansion, no formation of new channels.

To this the complex life of civilization affords a contrast of very great significance. Instead of being forced into a few stereotyped ways, love finds for itself innumerable little outlets to the

multiplication of which, as life grows more elaborate, there is no end. We find many made for us, and we continually make new ones while we consciously close others. For the beginnings of these lesser loves which we make for ourselves little more is needed than a degree of admiration combined with attention. Loves of this kind are continually springing up within us in connection with the thousand and one influences that, in the course of a normal life, touch our feelings and call forth our sympathetic regard. We love the flowers, the sweet influences of the changing seasons, the solemn majesty of the forest, the wind in the tree-tops, the light of dawn and of the setting sun.

We love individual men and women in the same passing way, not only those whom we meet bodily, but those also who form for us an image in the mind, the personalities that historians and gifted writers of romance have created. In every case what we love is more or less an idealization, conceived either by ourselves or by some other artist. It is perhaps only a little spark of love that goes out to each one of these objects in turn, a passing attention that, anon, devotes itself to other interests. But it is the true thing. The heart has been touched in the right way. And if the soul be in good health, we are the better, every time, for the experience, — better physically, mentally, spiritually. What sunshine does for the ripening fruits, elaborating in them the higher

qualities of flavour and beauty and perfume, that, these lesser loves, these repeated, though short-lived activities of the heart, do for the ripening and refining of the character.

I have said that these are of as many different kinds as there are individuals to love, or objects and interests to call forth love. But, we may classify them, trace them to a limited number of sources, and study them with a view to larger generalizations.

Various lines of classification suggest themselves. The love of persons constitutes one great group by itself. The love of things seems altogether and quite distinct from it. And again, the love of interests, ambitions, ideals, is a third group. And fourthly, there is the vague, mystical realm in which love dwells, as it were, in a more or less disembodied and unattached form, — the realm of the æsthetic, a half-understood, untranslatable, but, very real world. In this upper stratum of feeling we grow into the love of the highest kinds of music, of whatsoever is noble in poetry, in literature, and in art. It is here also that we are drawn into that pure, uplifting worship which we call the love of nature, and here, greatest of all, springs the love that, gathering all other loves into one, seeks and finds an embodiment, a spiritual entity, that it may worship with an absolute, whole-souled devotion.

Another scheme of classification that separates our loves into quite distinct groups is that which

regards them as related to the past, the present, or the future. Each of these groups has its own peculiar characteristics. The loves that are wholly of the present are rooted in the joy of possession. That which is loved may be beautiful, or valuable in the eyes of the world generally, or it may not. The ground of love is the consciousness of personal proprietorship. The rag-baby, that is caressed and petted to the neglect of the magnificent productions of the shop, is the type of this form of devotion, — "a poor thing, but mine own." From this root grows the passion for the absolute ownership of a bit of land, loved not because it is remunerative, but because it is personal. Here also belongs the passion for owning that which is unique, or rare, or very difficult of attainment; and again the love of a secret, the knowing of that which others do not know; and akin to this, also, the love of being the first to discover what has hitherto been a secret of nature, or an unknown country, or being able to give the world something original in the way of thought or invention.

It may be the passionate and jealous love of a person. Mine! mine! mine! is the cry of the lover. Mine own! the fruit of *my* body, mine to love, to live for, to educate, is the exulting soul-song of the parent. We often hear it said that love is unselfish. It has its unselfish side. But it is also the most actively, violently selfish principle of which we have any knowledge. Nothing is so cruel, so revengeful, so utterly

implacable as love. Love, of some kind, is the root of all selfishness. What is selfishness but self-love run to excess and madness? though self-love in its normality is the very spring and motive power of all our higher life. It is no more to be deprecated than any other kind of love. As compared with other kinds it is *primus inter pares*, because all other kinds depend upon it. It is the living root from which they spring and draw their nourishment.

Turning now to the loves of the past, those which have their attachments in bygone experiences. These are the loves of actual life, transfigured, softened, idealized. Memory has dropped the coarser elements, the restless, anxious, disturbing elements, and cast over all a glamour like that of twilight. It is not all distinctness, nor all vagueness, but the two are mingled. Memories that we love to dwell upon stand out clear in the pictured past, set in less well-defined but hallowed associations; and, beyond these,

> . . . "those first affections,
> Those shadowy recollections,
> Which be they what they may,
> Are yet the fountain-light of all our day,
> Are yet a master-light of all our seeing."

We, as a rule, recognize but faintly how much we owe to these loves of the past, not alone for the refinement and solace of life, but also for its stability and its inspiration.

The idealized past and the idealized future join hands to pull us through the conflicts and distractions of the garish present. The two stand in the sharpest contrast to each other; the past calling us to reflection and contemplative admiration, the future thrilling us with desire for action. The loves of the past bring human experiences before us in such a form that we can appropriate them, brood over them, and by oft-repeated communion, assimilate them. Our imaginations form themselves upon them, acquire habits of admiring and loving that which is best worth loving. That which has been adorable, the heroism, the fidelity, the heart-kindness, and devotion of those with whom we have associated, not only in our immediate lives, but also in the pages of history and romance, become enshrined in our hearts as very real things; and in them we find, ready to our hand, the tested and approved materials with which to construct those ideals for future realization which become the lodestars of our active, evolving souls.

II

To estimate justly the bearing of these minor enthusiasms upon the great end of life we must look at them from more than one point of view. One that readily suggests itself is furnished by the analogical likeness which they bear to the plants and flowers which the earth brings forth of itself. The whole course of our lives is glad-

dened by these wild-springing products of the soul, and, as in nature the plants and flowers that the earth brings forth spontaneously are the foundation of all that has been achieved in agriculture and horticulture, by selection and cultivation, so also it is in the improved fields and gardens of the soul. It is the lesser loves that lead up to the greater ones. It is the transient, fragmentary, sporadic worships that show us the way to that which is permanent. And in the one case as in the other, the desirable outcome is reached only by persistent and painstaking effort.

We may, indeed, profitably carry this analogy further and say that, as in the one realm so in the other, an essential preliminary is always the intelligent selection of those specific natural products which are best worth conserving and improving. That we are daily throwing away invaluable opportunities may be assumed as certain when we look back upon the years and ages that men have passed in blindness to potentialities which, when later revealed, seemed as evident as sunlight. These potentialities have, so to speak, run to waste, wearing channels in our experience, but helping us on only in the most incidental ways. We have enjoyed them, have amused ourselves with them, have taken toll of them, but how faintly have we understood their meaning and their possibilities! What are they? Whence have they come to us? Are they any-

thing more than the fleeting moods of a highly sensitive nervous structure? And if so, if they are more, what implications as to deeper significance do they involve?

It will help us to determine the *more* if we recognize fully that they are this, — the moods of a highly sensitive nervous organism. They are the responses of that organism to a most varied and heterogeneous environment. And we have to recognize further the fact that they are what they are, because the constitution of that organism is what it is. We are instruments, so constructed and attuned to the world, that strains harmonious, or discordant, are produced when we are played upon.

And here another factor comes into view, — the agency that plays upon us. In one case it is, apparently, an impersonal, unbidden influence, that sweeps over and through us as the wind through the strings of an æolian harp. At another time it is an influence flowing from some well-defined external source: this may be an event, it may be a vision of something that appeals to hope and expectation; it may be the influence of other persons acting through sympathy, persuasion, or attraction. And lastly, it may be an influence generated and operated within the sphere of one's own volitional self. Each one of these classes is deeply significant, both in itself considered and also as related to the other classes, for each one throws light upon the other.

To begin with the influences that work upon us from without. Such influences find, in every case, an inborn germ to work upon. For that germ we are not responsible; for its incubation and growth to maturity, we are. Now let us give our attention to the fact that the innumerable influences of this kind by which we are importuned are in the general consensus of human estimation, ranged on a fairly well-defined scale of values. Choosing one set of influences, we have produced within us enthusiasms of a low order; choosing another, we reach toward the highest. The lower ones are the more easy of development. They are quickly and cheaply brought to maturity, and in many cases they are ephemeral, leaving us as easily as they came. But when they are recurrent, repetition brings forth habit, and habit means mastery.

The production of this class of enthusiasms occupies a very large share of the world's attention, partly because they cost so little and partly because they can be made so useful by those who exploit their fellowmen. They can be manufactured, so to speak, by administering drugs to the system, — alcohol, nicotine, opium. They can be promoted by a frenzy of speculation helped on by a brass band! They can be generated by all kinds of sporting competition and games, with money-wagers for accessories. They rise to fever-heat in political crises, and they have, through all the ages, characterized unreg-

ulated religious movements. But, on the other hand, they have innumerable gentler developments. Spontaneous affection, the love of nature and the love of music, the love of any kind of graceful or exhilarating motion, the mere exuberance of health, — all these, in their simpler manifestations, belong to this same great class. Different as they are in their qualities and tendencies, they have one important characteristic in common, that is the ease with which they are generated.

For the most part they are *permitted*, as distinguished from cultivated, enthusiasms. They come very largely without our solicitation and, if we allow it, run their own course without demanding effort from us. Some of them we recognize as altogether mischievous and destructive. Many of them, on the other hand, are the first glimmerings of a light that may be made to flood our whole lives. They cannot develop these possibilities of themselves, but they can be the assistants, the indispensable coadjutors, of a higher range of enthusiasms, the distinguishing characteristic of which is a passion for achievement.

These are the active, energizing enthusiasms, that reach out on all sides for the materials and the power with which to realize themselves. And the true significance of the first class is never realized except as its enthusiasms are taken up into and made to serve the second. These higher,

masterful enthusiasms are the constructors of character and of society. They make men, they build up the body politic. They carry the race on to higher and still higher planes of evolution. But, no more than the first class are they all good. They tend to evil as energetically as they tend to good. And also, like the former class, if restricted simply to the development of their own blind careers, they end in nothingness. Their true significance lies in a something beyond, a something which they, from this side and that, suggest and foreshadow, but which no one of them, in its isolation, can ever reach. Each one of our nobler enthusiasms carries us up to a borderland of wonderment and there leaves us. It shows us that there is a beyond, it suggests that it contains values far greater than any that we have known, but it cannot tell us anything more.

III

Now for a somewhat different point of view. In all our thought, thus far, we have objectified these influences, treated them as something not-ourselves, things springing up within us, but not a part of us, agents that act upon us and upon which we in turn react. But now we have to remind ourselves that this way of regarding them is purely provisional. Really and essentially these springing enthusiasms are ourselves. Each one, as it makes its appearance, is the realization of

a new phase of the soul. It opens to us new possibilities of being, new modes of feeling. In short, it introduces us to a self in some respects quite different from any self that we have known before.

But to what does this bring us? a plurality of selves? To say this would be misleading; yet experiences that suggest such a state of things are familiar to every one of us. A perfect unity of personality is a condition not-yet-achieved; it is an ideal toward which we are moving, and a conspicuous feature of our present stage of self-realization is, even with those most advanced, its fragmentariness. Though we know the self we are trying to realize to be a unity, a personality, the one indivisible reality of our consciousness, yet we have to recognize the fact that we know ourselves largely in detachments, — almost, in fact, as if we were not one, but a community of more or less heterogeneous individuals associated in one household.

We are prone to characterize others as inconsistent and to find fault with them because they show us different sides of their many-sided selves at different times. Or, perhaps, if we do not find fault we mentally apologize for what we call their moods; and yet, if we have the smallest amount of self-knowledge, we know ourselves to be quite different people at different times, and not infrequently, in moments of indecision, a number of different people at the same time.

In other words, that gradual organization of experience that builds up the conscious-self within us proceeds not in one line, but in many, sometimes apparently divergent, lines.

Now, in order to accomplish anything in this world, we have to concentrate. This means conscious organization, a more or less determined realization of self in a chosen direction, and it also involves turning our backs for a time, at least, on a number of other interests that may be the specialties of our friends and neighbours. I have said this is a necessity. It is also an evil, not simply in the general way of being a limitation; it is a positive evil, in that it has a tendency to contract and distort that self which asks for a symmetrical, comprehensive development. Only in a few cases do we encounter the extreme of this tendency. And when we do, we call it insanity, monomania. But we know that we all have the seeds of this kind of insanity within us whenever we are in earnest about anything.

For the preservation of that mental balance which we call sanity we are confronted with another necessity. We are constrained to give ourselves heartily to the cultivation of some other interest, or interests, which are for the time quite unassociated with this one to which we have pledged ourselves. Ordinarily, environment presents us with invitations, more or less urgent, in a variety of directions. Family and social life put in their claims for a share of our attention,

and, if we respond to these heartily, letting an appreciable volume of our sympathy and vitality go out to them, we realize a self that is quite distinct from the self that is developed in our business, or profession. In every kind of recreation, in every kind of keen enjoyment, we come upon a somewhat different self, that sometimes surprises us beyond measure. And this surprise, this discovery of new capabilities, is the source of our greatest pleasure when we turn from one occupation to another.

Repeated experiences of this kind of pleasure give rise in many to a craving for constant change, that defeats the ends of self-realization by the absence of continuity. We become so many selves that we have no particular self. We lack individuality. We are not building anything in the way of character. We add nothing to the capital of life. We are simply spending. We must then turn back to concentration as the fundamental principle of the growth of personality. There must be one absorbing, dominant interest to which all others are tributary. Our manifold adjustments, with a view to this subordination and organization, are the commonplaces of everyday life. We engage in a variety of occupations that are not directly connected with each other, that we may advance to the achievement of some definite end, or the satisfaction of some special instinct that, looked at from the outside, is quite remote from any one of them.

An illustration of this might be as follows. The indispensable condition of my success, as regards the main purpose of my life, is the possession of a sound mind in a sound body. Without that I can neither be, nor enjoy, that which the ideal end of my striving has promised me. For the possession of this I must distribute my vitality in a variety of directions that have only an indirect bearing on my main purpose. If I starve myself bodily, mentally, or emotionally, I am rendering the realization of the ideal self incomplete to the extent of the starvation.

If, on the other hand, I allow myself to fall into greediness in any one of these directions, because of their pleasantness, I shall quite as certainly fall short of the end that I am trying to work out. Every one of these subsidiary activities is good and wholesome. But each one of them, as if jealous of the others, is capable of playing the part of betrayal in the attempt to capture and control me. If I am, in any measure, equal to the situation, if I am wise in the selection of my activities and firm in their control, they will be not only my useful servants, but also my devoted friends. The pleasures they are capable of giving will be enhanced tenfold because of the object to which they are tributary. They are something more and quite other than themselves; they are ennobled by the noble end which they serve.

Now let us observe that this kind of subordina-

tion exists on a great variety of scales. The end that we have called the nobler one may be only *relatively* noble. It is something that promises a larger, more satisfactory self as related to those other ends that are tributary to it. But, anon, the horizon widens, a more extended vista is open to us. New desires are formed and objects or ends, hitherto unseen, outline themselves and become the characteristics of a still larger ideal self. Hence a necessity of reorganization. That which has been the dominant interest becomes secondary, subsidiary, if it fits into the reorganization. If it does not, it remains outside, left behind, an arrested development.

This leaving behind of an old self is often a painful business. While we have a vivid apprehension of something better and higher, and are strongly impelled by our moral instincts to achieve it, the old self holds us with the tenacious grip of habit. The new conception that has made us restless seems to demand a change of constitution, a new birth, and in the lives of most of us there are crises that correspond to these seemings. Now all revolutions are, in themselves, things to be deplored. However necessary, they are disorganizing. They break up the order that has been, without at once establishing a new controlling order. If frequent, they are altogether demoralizing. To avoid them, if possible, is the counsel of wisdom. How to do this is one of our difficult problems.

Not that the end to be attained is obscure. By a number of different paths, different sets of inferences and constraining necessities, we have, in the course of our discussion, been brought up to the recognition of one definite requirement; namely, the conception and the adoption of an end so high that no other one can ever get above it, — an object of reverence and worship so comprehensive, so inexhaustible, that we can never weary, never be thrown out of the running through having come to the end of it.

And further, we have seen that there exists for each one of us an objective end, embodying to the full all these qualities, — a living responding reality, distinctly conceived and yet, as related to our minds, one that is always growing and expanding. But, it is one thing to be persuaded of the existence of such a reality, to intellectually approve it as the solution of life's great problem, and quite another thing to appropriate it, to make it actually and vitally, in personal experience, the grand motive of life. This is something to be achieved. How to make that which we intellectually and morally approve identical with that which we love and live for, is to progressively work out our own salvation.

CHAPTER XV

THE WILL TO LOVE

CAN we, by willing to do so, make that which we intellectually approve, identical with that which we love and live for? In other words, can we, by this means, come to know personally and experimentally the God Whom we know theoretically?

In the chapter before the last we outlined the general principle by means of which it is possible to transform indeterminate concepts into efficient agencies, and we considered the process by which the will can establish in the mind dominating intellectual convictions for the regulation of life. It remains for us to follow out the same general line of thought, as related to the establishment in the soul of a central, all-controlling enthusiasm, a love to God that shall make all things tributary to it. It is perhaps needless to say that we do not claim for the will any immediately coercive power in this direction. Will and intelligence must move together. Intelligence, without will, is impotent. Will, without intelligence, is blind. Together they can remove mountains. Intelligence

must first study out the ways of doing things. It must sort out from experience those elements that are serviceable, that throw light upon the problem in hand, that have perhaps already partially solved it. Then the will brings to bear its power of concentrating attention.

Herein lies the secret of all achievement. The will has the control of the situation, if it has preserved and strengthened its power of compelling attention. This is the condition of progress in any direction, not alone in the sphere of religion, but in all spheres. We live in the world surrounded by untold resources, the potency of which is for the most part hidden from us. Having eyes we see not, having ears we hear not, neither do we understand. We are half-conscious of the outsides of things, of their appeals to the senses; but, of their values we know only so much as the will forces from them by the application of its great solvent, *attention*.

There is a religious side to all the activities that make for the enlargement and deepening of life, or that contribute in any way to human welfare, if we set ourselves to find it and to live in the light of it. A great hindrance to the development of a unifying, all-controlling love to God has been the extent to which we have been in the habit of satisfying our religious natures in a special and somewhat separate department of experience. This is not said in disparagement of that special department. Modern thought is not the whole

of thought. The land which it is taking possession of has been long occupied. Great and rich cities with rival interests have held sway within it. Modern thought comes, not pre-eminently to destroy, but to conserve, to rescue, to reconstruct, and to vitalize. Modern thought is the offspring of ancient thought, and has drawn its sustenance from it. The specialized form of worship that we have inherited has not come to the end of its usefulness because religion is called to undertake a wider jurisdiction and a more complete control of life.

The language of religion that has come to us through the Church, its lofty and loving conceptions of God, its reverence-inspiring ascriptions, its creeds, in so far as they are expressed in terms of devotion, constitute a life-giving atmosphere, a spiritual ozone for vitalizing, purifying, and inspiring our lives. We live in these symbols as we live in the social medium, without thinking of it. We have been moulded by them. Whether conscious of them or not, they are organic constituents of the world in which we move. To foster them, nourish them, and protect them, as the most valuable and vital products of human evolution, is the highest wisdom. To permit them to grow dim, to become dishonoured and made ineffective through neglect, is to trifle away our best inheritance.

The *formulated* creeds that have come down to us are like monuments in stone, marking the

crises through which the Church has passed in its struggle upward to the light. They are the records of well-fought battles, — ancient fortifications, fashioned to withstand the inroads of a different environment from that which surrounds us to-day. The creeds, on the other hand, that have come to us in the devotional language of the Church, — in its prayers and psalmody and music, in its inspired outbursts of God-consciousness that makes us sharers of the divine experiences of those who have lived in the far-away past, — these are the living spirit that those old walls of faith were built to protect in ages of narrower outlooks. They served the exigencies of their day; they are historic relics now; while the religion that they shielded has come out into a larger place and, with new hope, looks toward a future of indefinite expansion.

In our devotional expressions of faith there is little to alter. We may wish to prune here and there, to cut out withered branches; but, for the most part, the old language rings true. We worship and refresh our souls in the old phrases, and feel that no others could serve our spirits half so well. The God to Whom we pray is the God of the Prophets, of the benignant Psalms, the God of Jesus and of His Apostles, the God of the spirits and souls of the righteous in all ages. He is the God of the Book of Common Prayer; the Almighty and Everlasting God, the merciful Father; the Eternal God Who alone spreadest

out the heavens and rulest the raging of the sea; He is the giver of all good gifts, Who openeth His hand and fillest all things living with plenteousness; He is the high and mighty Ruler of the universe; He is the Creator and Preserver of all mankind; He is the Father of Our Lord Jesus Christ, and our Father.

We cannot, as I have said, exaggerate the importance of this part of our religion. But, in addition to the conservation of this, the will-power of to-day has another most important and serious task laid upon it. It must bring attention to bear, with all its constructive gifts of imagination and idealization, upon the discovery of God in all the activities and enthusiasms of life. Not in all, at once. The first clear sight of God, outside the formal worship of Him, comes through a great variety of experiences: to one through the love of some other human being, to another through the love of nature, to another through the binding up of the wounds caused by disappointment or bereavement. "Man's extremity is God's opportunity."

For many of us, the most direct way to God from the secular life is through the reverence we conceive for some of our fellow-mortals. Idealized men and women become the stepping-stones by which we climb to higher things. Some of us come in contact with such in the intimate relations of our lives. But, the principle is more conspicuously illustrated in the feeling of reverence

and love and loyalty that attaches itself to those who have demonstrated their greatness in wider fields — the leaders and saviours of men.

This is a feeling that is sometimes strong enough to suggest how one's whole life may become centred in another personality and be lifted by it into a higher atmosphere. In the words of Carlyle, "No nobler feeling than this of admiration for one higher than himself dwells in the breast of man. It is to this hour, and at all hours, the vivifying influence in man's life." * In so far as such a love is instinctive, it is the outgrowth of man's highest and most cultivated instincts. If deep-seated and abiding, it rests upon judgments, moral discernments, that have grown up gradually in connection with life's manifold experiences. The great man is the objective reflex of an ideal that has been moulded with the careful pains-taking of the sculptor who makes, unmakes, and remakes the outlines of the clay that is to embody his vision. An essentially mean man cannot admire a great one. Only in so far as we are noble in ourselves can we fasten to the nobility of another and be lifted by it to still higher things.

In such enthusiasms the idea may be quite independent of the physical embodiment of the person who is the object of it. Few of us have the good fortune to know at first hand our great contemporaries, if such there be. And, if we have

* Carlyle's "Hero-Worship," p. 14.

what we call a personal acquaintance with them, the feeling of reverence is not necessarily augmented thereby. That there is such a thing as physical charm, personal magnetism, is not questioned. But, on the other hand, many of our devoted attachments are fixed upon those who are no longer of this earth. And yet we know them personally quite as truly and perhaps more purely and essentially than those others whose hands we have grasped, whose eyes we have looked into, whose smiles, or frowns, we have felt.

We know and love the personality of those exponents of our race who, ages ago, gave us the Psalms and the grand utterances of the Prophets. They impressed not only themselves, but also the God, Whom they loved and worshipped, upon all subsequent ages. His individuality was as clear and distinct to them as that of the men who lived and spoke and ate with them, yet, transcending human experience, it lifted its worshippers out of themselves.

They asked not to see His form, nor any material image of Him. Such a thought was sacrilege. But, for all that, they knew Him. His thoughts, His ways, His works, were everywhere in evidence. The heavens proclaimed them, sun and moon and stars, the seas and floods, the winds of God, Summer and Winter, dews and frosts, mountains, and hills, all green things upon the earth, fowls of the air, beasts and cattle, spirits and souls of the righteous, holy and humble men of heart, —

all these were to them the living, never-silent expressions of His manifold personality.

The grand thoughts that they were permitted to utter were only the echo of the grander psalmody of the universe, to which they had listened with attentive spirits. "How precious also are Thy thoughts unto me, O God! How great is the sum of them! If I should count them they are more in number than the sand! When I awake I am still with Thee."

If, in those far-away simple ages, before the revelations of science had so immensely extended the field of our knowledge, men could be overwhelmed with the multiplicity of God's revelation of Himself, what shall we say of an age pulsating with new discoveries, new expressions of His power, hitherto undreamed-of disclosures of the manifold elaborateness of His methods? Have we permitted all this added knowledge to build up a wall of partition between Him and us? Dazed with the magnitude of our discoveries, have we taken to worshipping these, in the place of the great soul of things that informs them all? Is there, in the nature of things, a necessity for such a change of attitude? Was the insight of the Hebrew seers conditioned upon the simplicity of their conceptions? And must we, in this more enlightened age, be despoiled of all the poetry and uplift of our souls because we know so much?

There surely is a better way, a way with which

we are familiar, and of which we make constant use in other relations of life. Do we lose our regard for the work of a great master in painting because we have visited a studio and been made acquainted with the mechanical part of his work? Do we cease to be moved by noble music when we have learned the structure of instruments, the laws of vibrations, or the fact that music itself can be stated in mathematical terms?

To illustrate the application of this, let us imagine ourselves before the work of some truly great artist, that has stirred thought and feeling, and lifted us for a time into a higher atmosphere. Suddenly, by some inconsequence of thought, we revert to earth and begin to reflect upon the means by which the picture has been produced,— how it came to be what it is, what vehicles of expression were used, the nature of the canvas, the pigments and their chemical constitution. The picture, by this means, is resolved into a mass of heterogeneous, unmeaning crudities. Its glories have faded into the light of common day. How, we ask, can these things, or any combination of them, have produced the wonderful effects that still linger in our memories? Clearly we must look beyond them for an explanation of the phenomena. We must look from the materials to the manipulator.

Human hands combined these pigments. Human hands stretched the canvas to receive them. A human hand travelled long and dili-

gently over this surface, distributing the colours here and there, till this strange result was reached. What moved that hand? Muscles, nerves, and a vast complexity of organs, on the activity of which they were dependent. What was the secret of all this activity of the organism? In the first place vital force, a principle that no one knows anything about except that it seems allied to and transmutable into all other forms of force that manifest themselves in the world about us; and, in the second place, nutrition. Beef and potatoes, bread and sausages, coffee and tea, wine and water, all kinds of food and drink were supplied to this complex organism, were assimilated by it, and transformed into the activities that have produced the picture in which we are interested.

How very unsatisfactory! We must look elsewhere. The effect that the picture produced was clearly not a thing external to us, it was a personal experience. How did it come about? Continuing the same method, we come upon an organism that has a like nature with the one we have been studying; that is, our own receptive organism. Waves of light have transmitted influences stored up in the picture by organism number one, to organism number two, which we call ours. These, coming in contact with sensitive parts of that organism, have been transmitted by different nerves to certain cells of the brain, these have organized themselves in a peculiar way, and as a

result the impressions of which we were conscious ensued.

An explanation of this kind, to be exhaustive, would include, more or less directly, all the agencies that have been at work in the world, and when the whole story is told we are none the wiser. For, when we reach the end, the unanswerable question arises, What am I? And this the study of all the instrumentalities that have ever been cannot touch. We must begin all over again, taking our stand on the two original concrete realities of which we are sure: first, the effect produced in us by the picture, and second, the picture, in which we have to recognize another concrete reality standing out there as part of a world which, though it appears to be of a totally different order from mind, yet is capable of producing mental and emotional effects. It must be, therefore, that this second concrete reality, as related to our minds, is nothing more nor less than a transmitting agency, a means of communication, a language by which we are brought into vital relations to another mind.

As matter of fact, we know, by a process of analogical reasoning, so familiar to us that we take no note of it, that this picture existed in the mind of its creator before it ever existed in the form of which we are cognizant. We know, moreover, that the same mind that originally conceived the picture has been at work, discriminating, selecting, combining, through every stage of the process

by which it has come to be what it is. With a wisdom and skill that the novice is utterly at a loss to follow, the artist has moved on, step by step, marshalling these crude, senseless, unmeaning things into such relations to each other that they convey to another mind the most delicate shades of feeling.

Now, let us ask, whence come these emotional effects? They are clearly something common to the experience both of the artist and of ourselves. They are realities that have grown up in him and in us by virtue of a common nature. They may have been more or less latent in him until he gave expression to them; they may have been latent in us until his expression brought them into consciousness. But, even so, what *are* they and what do they mean? What is the explanation of their presence? The picture represents something in the world of external reality, — it may be a bit of natural scenery, it may be a human face. But here again we come up against the same wall of material things. The bit of nature, the human face are made of the same stuff as the picture; that is, of things as material and meaningless in themselves.

We say these things affect us because we have associations with them. But, if it is through association with inanimate things that we have come by these ennobling sentiments we must again fall back upon the inference that the combinations of material things, that we call

phases of nature, are also transmitting agencies. There is a mind working behind them and in them. They are but the outward expression of the love and the grandeur, of the gentleness and harmony, of the depth and purity, of some Being immeasurably greater than ourselves, in whose thought and love we are able to participate because we are his offspring, because we share his nature, and because we are ever more made conscious of new and springing capabilities in this direction.

So also, it is our privilege to know and to feel God in every good word and action of our fellowmen. He, when we get to the bottom of the matter, has inspired it all. We honour man no less, for he also has been the author of the good thought and the good act. But God it is Who has been working in him from first to last. To know what God is like, we have only to look in the faces of the best men and women who are living about us. If their faces have been moulded to nobleness and benignity it is the greatest of all artists who has been the sculptor. If noble thoughts have dwelt within this man, not he alone has been the thinker. God has thought with him, supplementing, perfecting, harmonizing, sublimating. So also, when we look into ourselves, every noble impulse, every incentive to better things, every inspiring glimpse of a more satisfactory self to be attained, is a movement of God in us.

The idealizing faculty, by which we are permitted to construct a conception of that better-self, is also His faculty, His medium of direct communication with us. It is the language in which He speaks to us, encouraging, sustaining, luring us on with hopes and promises. We sometimes speak of "the smiles of an approving conscience." Why not say "the smiles of God"? "Lift Thou up the light of Thy countenance upon us" should be our daily prayer, and the fulfilment of it our abounding and all-sufficient happiness.

When our eyes have been once opened to this greatest of all realities, it is like the rising of the sun over a benighted land. One point after another of our world is touched by its gilding rays, then all the uplands are illuminated, then its life-giving beams penetrate to the valleys and light up its darkest glens. Every lovable thing in this world is educating us for this experience, and every lovable thing is transitory for the very reason that it exists for the purpose of lifting us into something inexpressibly higher, more satisfactory, more enduring, than itself.

APPENDIX A

The Evidential Value of Analogy

ALL our constructive knowledge is conditioned upon one great fact of the universe that underlies it. Experience has demonstrated that the universe is, to a very great extent, a series of modified repetitions, so that an intimate knowledge of any one part of it is, within certain limits, a true guide to the interpretation of other parts of it and, progressively, to every part. On this fact all our analogical thinking hinges; and, so far as elaborated knowledge is concerned, all our progress is dependent upon the use of analogy.

The intellectual process through which our knowledge is continually extending its bounds has three well defined stages which are interdependent. These three stages we may call *investigation*, *speculation*, *substantiation*.

The first and the last of these are the prosaic parts of knowledge-getting. They have to do with the actualities of the world, and involve plodding, laborious application to details. The middle term or stage is, on the contrary, an activity of the imaginative faculty, in the exercise of which, construction is absolutely unfettered. Like a sorcerer, it makes and unmakes, builds and destroys without stint. In it the poetry of the world takes its rise, and inheres.

Without it there would be no enthusiasm in living, no idealizing, no uplift from the heavy, dull round of necessary occupation. It is the very soul of art. It is the solace of our quiet hours; it is also the instigator of all our bravest and noblest endeavours. It holds us to our purposes, makes us strong in adversity, loyal in the presence of seductions. It is the faculty by which we transcend ourselves and rise in the scale of being.

But all its nobler uses are conditioned upon discipline; that is, upon its working in harness with the other above-mentioned factors. These two, labouring on either side, tend to keep it in order while it, in turn, sends a current of life and inspiration through them, making the movement toward knowledge, notwithstanding its drudgery and set-backs, an experience, on the whole, of joy and ever-increasing delight.

I am not saying that we always *consciously* apply these three forms of activity in our conduct of life. Instinct goes before understanding. Even after we have accustomed ourselves to reflection, we employ the three-fold process as if it were no process at all, and call it sympathy, intuition, divination. And when, perchance, we do turn our attention to the nature of our methods and processes, we find these activities already functioning in perfect order. Every time we encounter an object that is somewhat strange, and make an effort to assimilate the new experience to the established society of our accepted beliefs, we go through all the three stages. The perception of it arouses curiosity and the question, what is it? Instinctively we call before us resemblances that may suggest a partial answer. This leads to a guess or hypothesis as to its nature; and then, if we are per-

mitted, we proceed to test the correctness of it by the sense of touch, or smell, or taste. The continued use of this process underlies all our organized knowledge. Even that which seems the most directly given is, in reality, the product of its employment.

To use Mr. G. H. Lewes' expression, every new idea must be *soluble in old experiences*, be recognized as like them; otherwise it will be unperceived, uncomprehended. A conception which is novel, or largely novel, is unintelligible even to the acutest intellect, It must be prepared for, *pre*-conceived; and, by the exhibition of its points of similarity and attachment with familiar conceptions, its congruity with these, may become the ground of its acceptance."*

Except for our own self-consciousness we could know nothing whatever of self-consciousness or intelligence in others; and, beyond the instinctive stage, our progressive knowledge of them is attained, first, by a series of analogical assumptions, or hypotheses, which may properly be described as prejudices; and, second, by the verification or correction of these by further experience. Certain general conclusions with regard to mankind result from this. First, that all members of the human race are like ourselves and like each other; second, that no two members of the race are like each other; and third, that the least developed can have only a very limited and imperfect knowledge of the most developed. In other words, experience endorses our use of self-knowledge as the ground of interpretation for conscious beings widely separated from us, but, at the same time, lays upon us the necessity of allowing for wide, blank

* "Mind as a function of the Organism." Sec. 77.

spaces in our conception. The more closely connected two persons are by birth, training, and temperament, the fewer the blank spaces, the more complete and trustworthy the conception formed. Yet those who are most widely separated find, in virtue of their common humanity, grounds for a fairly probable judgment of character.

But this is only the beginning of the analogical use to which we put our inner knowledge of self. All our interpretation of the motives of the lower animals proceeds upon the same principle as our interpretation of men. In our critical moments we may be inclined to deny that a shepherd-dog has any community of nature with man. But in the synthetical, practical judgments of his shepherd-master he figures as a slightly modified human being. I think I may affirm that our success in dealing with the more intelligent animals depends upon the faithfulness and discrimination with which we apply this self-derived analogy. "Put yourself in his place" is, within certain limits, as good a maxim for the regulation of our conduct toward a horse as toward a man.

From the more intelligent animals we descend by regular gradations till we reach those that are lowest in the scale of organization. The structure of the apparently brainless ant, with its plurality of co-ordinate nerve centres, seems at far too great a remove from the human organism to afford the slightest ground for a trustworthy analogy. But when we study its adaptations and modifications of means to ends, we are, in spite of our knowledge of structure, convinced that ants not only have something closely resembling intelligence, but that they have an amazing amount of it. And when we drop still lower to contemplate

the behaviour of the apparently structureless amœba in search of its food, we are constrained to apply the same analogy for the explanation of what we behold. The inferences we draw are crude, and perhaps in many respects wide of the truth, but it guides us toward the truth, and is the germ of our conception of instinct.

Now, with regard to the threefold process, here are certain facts; this process is embedded in our nature, we find it in operation before we reach the stage of analyzing our mental processes, we have discovered no substitute for it in the conduct of daily life. These considerations are to my mind the strongest possible justification for the belief that this threefold method is the one by which *all* our constructive knowledge is to be acquired. This is my hypothesis; and for its endorsement I must make inquiry of the various departments of human knowledge that have most grown and prospered, to find out how it has been with them. Have they found another method more reliable or shorter or, in general, more satisfactory? The physical sciences, for instance, have they invented a better way? On the contrary, all their triumphs in the past have sprung from the use of the three-stage method and all their hope for the future is vested in it.

II

Up to a certain point the labour of science consists in observation, in prying research for the collection of a great number of facts; then comes the work of comparison and classification; then the work of conjecture, in which the imagination has free play; then

the process of exclusion, in the course of which many of the suggestions of fancy are set aside as unworthy of attention; then the process of verification for the proof, or disproof, of the surviving conjecture. We are at present interested in that stage that relates to the formation of hypotheses.

The scientific imagination is, from the first, held in partial control by past experiences, which, at the same time, restrain and furnish it with building material in the shape of resemblances. Guided by these, it constructs an hypothetical explanation of a given group of phenomena; that is, it finds an analogy. Having, with the aid of this, ascertained a principle of limited range, it expands this again by the use of the imagination, till the same principle is serviceable for a very much wider class of phenomena. Every time it repeats this process it acts on the assumption that the world is a series of modified repetitions: and every time an hypothesis so made is verified, the correctness of this assumption receives an additional proof.

The results of science thus present us with what has been appropriately called a "hierarchy of principles." Each partial generalization foreshadows a higher one in which it is, soon or late, seen to be comprehended. And what is true of principles is equally true of groups of phenomena. The whole science of classification depends upon the fact of repetition, with modification, on different scales.

Comparatively recent discoveries have disclosed the existence of such orderly arrangements on different planes where we should least have suspected it. Chemistry, as we know, is arrested in its all-dissolving course by certain elements that seem to defy analy-

sis, — elements that have therefore to be provisionally treated as final, absolutely dissimilar substances. Here, if anywhere, we should anticipate that the above-mentioned rule would fail us. But, almost simultaneously by a Russian and a German chemist, the very remarkable discovery was made that these elements are capable of being classified in successive series.

The following very brief and clear statement of this was given some years ago by Professor Huxley: — "If the sixty-five or sixty-eight recognized elements are arranged in the order of their atomic weights, the series does not exhibit one continuous, progressive modification in the physical and chemical characters of its several terms, but breaks up into a number of sections, in each of which the several terms present analogies with the corresponding terms of the other series. Thus the whole series does not run —

a, b, c, d, e, f, g, h, i, j, k, etc.

but

a, b, c, d, — A, B, C, D, — α, β, γ, δ, etc.

So that, it is said to express a law of recurrent similarities. Or the relation may be expressed in another way. In each section of the series the atomic weight is greater than in the preceding section; so that if w is the atomic weight of any element in the first segment, $w + x$ will represent the atomic weight of any element in the next, and $w + x + y$ the atomic weight of any element in the next, and so on. Therefore the sections may be represented as parallel series, the corresponding terms of which have analogous properties; each successive series starting with a body the atomic weight of which is greater than

that of any in the preceding series, in the following fashion: —

d	D	δ
c	C	γ
b	B	β
a	A	α
w	$w + x$	$w + x + y$

This is a conception with which biologists are very familiar; animal and plant groups constantly appearing as series of parallel modifications of similar and yet different primary forms." *

The discovery of this order led the Russian chemist, Mendelejeff, to indicate the existence of other elements not hitherto recognized. When he first ranged the known elements in a tabular form he found that a symmetrical arrangement left, here and there, vacant spaces. He called attention to these gaps, and ventured not only to prophesy that elements, then unknown, would be found to fill them, but even went so far as to describe in detail what these undiscovered elements would probably be like. Only a short time elapsed before the elements thus described were discovered.

Other illustrations of this principle, having a closer relation to our problem, will easily occur to the reader. If we wish to find an analogy for the assumption that the exceedingly limited may reveal the nature of that which is inexpressibly extended, we have only to call to mind the great law of Newton, — that every particle of matter in the universe is related to every other particle as each of the planets is related to the

* "The Advance of Science in the Last Half Century," p. *56*.

other heavenly bodies. Following out this law, in connection with the atomic theory, we attain to that astounding conception for which science has no rebuke, that a molecule may be a solar system in miniature. Alluding to such a conception, Professor J. P. Cooke says: "A theory which assumes that within the masses of material bodies the motions of suns and systems are reproduced on a scale so minute as to task our power of imagination to grasp the conception, is found to be in complete accordance with all the facts which can be observed." *

But there is another aspect of our hypothesis that needs illustration. The simplicity of the relations above instanced may seem to separate them by a wide difference from the relations postulated for the interpretation of the inner reality of living things. But even here we are not without a precedent in the methods of science. The marvel of marvels for condensed potentiality is the egg. For in it, by the aid of the microscope, we may trace the whole process of the creation of a higher animal. First we have the germ, a nucleated cell. This becomes two by a division of itself and by growth. By the repetition of this process it becomes a multitude. The egg then presents to us an aggregate of homogeneous cells, capable of being still further multiplied and, at the same time, modified into a great variety of classes having different forms and functions. By these, as by a trained army of artisans, each knowing just when to go and what to do, the living organism, that in its unity we call a being, is built up.

Now, in this wonderful process, modern science

* "The Credentials of Science the Warrant of Faith," p. *265*.

believes that it has discovered the true key to the history of the whole animated world. At the beginning of his book on evolution, Dr. Joseph Le Conte says: "Every one is familiar with the main facts connected with the development of an egg. . . . Now this process is evolution. It is more, — it is the type of all evolution. It is that from which we get our idea of evolution, and without which there would be no such word." As to the importance of the principle thus made known to us, the same writer says: — "The process pervades the whole universe, and the doctrine concerns every department of science, — yea, every department of human thought. It is literally one-half of all science."

III

Now let us see to what extent this important principle, suggested by the egg, rests upon analogy. It has been reached by the comparison of three separate series of forms found in nature. First we have the *taxonomic* series. This is the result of classifying the contemporary forms of animal life on a scale of relative complexity. Beginning with a unicellular organism, we advance, step by step, till we reach the higher animals, made up of innumerable cells having a great variety of forms, functions, and relations. The members of this series are not a succession of stages proceeding one from another, but a series of completed, independent existences living alongside of each other.

The second series is the *phylogenetic*, or geological, series. This seems to be the history in time, of the former. It shows that the simplest organisms came into being first, then those somewhat less simple, and

then, successively, those which were more and more complex. The members of this series do not appear to be genetically related to each other, any more than those of the first series, but the arrangement of their succession in time gives us the idea of a progressive creation. But now we come to the third, the *ontogenetic*, or egg, series.

For the purpose of comparison, the process that takes place in the egg is marked off into a succession of stages; and the relations which these stages sustain to each other seem to reveal in a wonderful manner the secret of the other two series. Like the taxonomic series, it begins with a single cell, and then, by the gradual multiplication and differentiation of cells, it reaches that unified complex of organs — a higher animal. In this series all the members *are* genetically related, that is, they are stages of being that proceed directly the one from the other.

This seems to explain the geological, or historical, series, because its members are similarly related to each other, both in the order of time and in the order of complexity. And it seems to explain the classification series, and to unite this with the historical, by showing how a series that has been progressive in time may, in its results, present the aspect of an aggregate of unprogressive, fixed forms. For the egg series, although progressive, gives rise all along its course, to forms that remain as immovably fixed as the different species of animals that we see around us. Different classes of cells, as we have seen, are evolved; and although some of these give rise to new classes, some of them remain to represent the particular phase of the organism that they introduced. The same is true of organized groups of cells. There

is a continual branching and re-branching. But, in the completed organism, the various stages of differentiation continue to be more or less represented by classifiable cells and groups of cells.

More remarkable still do these coincidences appear when it is further observed that the earlier stages of the egg series of a higher animal bear a striking resemblance to the more mature stages of lower animals. This is perhaps most clearly illustrated by a comparison of the successive embryonic stages of the human brain with the mature brain of animals lower in the scale. The first observable form is less elaborate than that of the ordinary fish. In the next stage it resembles that of a fish; then, by the relative increase of the cerebrum, it reaches the reptilian stage; by continued growth it partly covers the optic lobes and resembles the brain of a bird; then it wholly covers the optic lobes and, partially overspreading the cerebellum and the olfactory lobes, may be called a mammalian brain; and finally it covers and overhangs all and becomes a human brain. In view of these facts, Dr. Le Conte sums up the argument for evolution as follows: —

"Now, why should this peculiar order be observed in the building of the individual brain? We find the answer — the only conceivable answer — to this question in the fact that this is the order of the vertebrate brain by evolution throughout geological history. We have already seen that fishes were the only vertebrates living in Devonian times. The first form of brain, therefore, was that characteristic of that class. The reptiles were introduced; then birds and marsupials; then true mammals; and, lastly, man. The different styles of brain characteristic of these classes were, therefore, successively made by evolution from

earlier and simpler forms. In phylogeny, this order was observed because these successive forms were necessary for perfect adaptation to the environment at each step. In taxonemy we find the same order, because, as already explained, every stage in advance in phylogeny is still represented in existing forms. In ontogeny we have still the same order, because ancestral characteristics are inherited and family history recapitulated in the individual history." *

When presented in this form, the reasoning that connects the egg series with the other two does not, at first sight, seem to rest altogether upon analogy. But a close inspection of the argument will, I think, convince us that it has very little else to support it. The order of the thought seems to be this: first we compare the three series and find a close resemblance in the succession of their stages; second, knowing that the stages in the egg series are genetically related to each other, we *infer* that those of the geological series are similarly related; third, by a reflex argument, we infer that the reason why the members of the egg series are genetically related is found in the fact that those of the geological series were, *previously*, so related.

Now, aside from analogy, what support do we get for the first inference? If investigation showed that similar conditions affected the two series, we could at once establish our inference on the principle that like causes produce like effects. But this is not the case. The conditions in the one situation have no resemblance to the conditions in the other; at least they have no resemblance to the conditions that are

* "Evolution and its Relations to Religious Thought," p. *150*.

adduced as the chief cause of the original order. Conflict with, and adaptation to, environment are said to have had a large share in the origination of the race series. But the environment of the individual embryo is, in every respect, unlike that of the unprotected militant organism. In reasoning from the egg series to the geological, therefore, we have nothing to go upon but analogy; that is, a similarity of order existing under external circumstances that are quite dissimilar.

Let us examine the second step. Having analogically made the hypothesis that the members of the geological series are genetically related, how are we justified in assigning this as the cause of the phenomena of the egg series? It is said that the principle of heredity supplies us with the means of making such a deduction. But we must further ask, to what extent does the principle of heredity, as thus applied, rest upon inference from analogy? The answer must be, *almost entirely.* We know nothing about the principle of heredity, as related to the remote past, except inferentially and analogically. So far as direct knowledge of the law of heredity is concerned, it remains such a mystery from beginning to end, as to make the exclusion of almost any hypothesis impossible.

But the same ignorance of its laws makes it impossible to deduce results with any confidence from it. The analogies under discussion have contributed many suggestions about the law of heredity; but *from* the law of heredity, independently of these analogies, we get very little assistance.

The elder Agassiz, who did so much to prepare the way for the evolution hypothesis, brought to-

gether and classified the materials in all three of the above-mentioned series, and, moreover, made it the great work of his life to demonstrate the close relationship in which they stood to each other. He even went so far as to affirm that the observed repetitions were such as to render the embryonic series a true key to classification in the other two. But he did not advance to the position that species are derived from each other by natural descent, because there was nothing in the known principles of heredity to compel such an inference. The connection between the three series was, for him, one that had its origin in the mind of the Creator. There was a uniformity of plan and method, but not an interdependence between the series, or a derivation of one from the other.

In short, it seems to me unquestionable that, in so far as the modern theory of evolution gains support from embryology, it is indebted entirely to analogical relations existing on widely different scales, and under circumstances that seem to be wholly unlike each other. I am not, be it understood, attempting to disparage the argument thus derived. I wish only to show how much influence analogy has in determining our beliefs; and to what an extent the most complex relations may be employed as a key to the understanding of other complex relations from which they are widely separated. Nor, on the other hand, am I trying to make it appear that the analogical argument is the only one to which the hypothesis of evolution refers for support.

When once the hint of a genealogical relationship between species had been furnished by the egg series, scientific research busied itself to find corroborations of this hint in other and widely different relations

of things; and although this research failed to discover much that it expected to find, and found in many cases that which seemed, at first sight, the contradiction of the hypothesis it was trying to verify, yet, so many and weighty were the converging evidences in its favour that evolution was tentatively established.

IV

Let us now turn to the consideration of that most significant of all analogies, very old, very time-worn, the conception that is easily taken hold of by children, and to which the greatest intellects of the world have bowed in reverence; but which, from an intellectual point of view, has always been beset with difficulties. A pragmatic theology undertakes the removal, to some extent, of these difficulties. It sets itself the task of showing that the hypothesis of an indwelling intelligence, working and creating in the great world somewhat as man, the energizer and creator, works in his little world, is a conception that stands endorsed by the scientific method.

In pursuance of this end I will ask the attention of the reader to a very remarkable and instructive parallel existing between the evidential process that has led to the establishment of the doctrine of evolution, and that which has been the progressive endorsement of the doctrine of an indwelling God.

In both cases we have a trio of related series. And furthermore in both cases, one of the series, that which mediates between the other two, is composed of forms made known to us by modern scientific research. In the series that leads to evolution, the two presented to ordinary observation are, first, the geological, and

second, the series of contemporary species. In the series that leads to theism, the two that correspond to these are, first, the one made known to us in the history of man's creative activities, which we may call the *human series*, and second, the one exhibited on a broader scale in the history of the greater creation, which we may call the *divine series*. Both these two series have had to wait the advent of the third for a satisfactory interpretation. By themselves they suggested analogical resemblances and gave rise to hypotheses; but only when the third, mediating series was made known to us could these be scientifically endorsed. We have seen how the inference of genetic relationship derived from the geological series was vetoed by the stability and genetic separateness of the series of contemporary forms.

Just so, in the attempt to apply the analogy between what we have called the human and divine series, contrarieties of thought arose. Two distinct aspects of the human series as related to its centre emerged and divided the attention. On the one hand was the relation sustained by the individual to its completed products, which had become altogether separated from their author; on the other hand the relations sustained by the individual to its not-yet-finished products. The former tallied with the idea of a transcendent God, quite separated from his creatures, the latter to the conception of an indwelling continuously creating God, with whose existence that of the creature was vitally bound up. To this latter class belong all the constructions of man that are still in the formative process: — the unpainted or half-painted picture, the statue in the clay, the unrealized invention, the partially written book. The application of this

analogy presents every human being as a thought of God in the making, a creature of God only half realized.

But this most fruitful and, in some respects, helpful conception encountered serious contradictions in experience; for it took no account of man's freedom and responsibility. It seemed to obliterate the very fact in which the analogy took its rise, namely, the reality of man as an originating, creative centre. Taken by itself, its logical outcome was pantheism and determinism. Thus our analogy, that seemed so attractive and helpful in the beginning, proved most disappointing. If we followed it out on the line of completed products to a transcendent God, we had to think of ourselves as finished and dismissed, cut off from all vital connection with the Author of our being. But, if we took the other horn of the dilemma, we found ourselves at odds with the most vital reality of our existence.

But now we come to the third series, which is the key to the other two. We may call it the *organic*, because it presents the human organism to us in the two-fold aspect of a unity and a multiplicity. The unity is the familiar, significant fact of experience — the Ego. The multiplicity is the human body as known to science. The following statement of it is by Dr. Evald Hering: — "Millions of the minutest, separately existing beings, different in shape and external structure, compose a systematically arranged aggregate, thus forming the diverse organs; and these beings, in spite of their complicated interdependence, lead quite separate lives, for each single being is an animated centre of activity. The human body does not receive the impulse of life, like a machine, from

one point, but each single atom of the different organs bears its vitalizing power in itself." *

Each of these living-beings, known to science as a cell, consists of a protoplasmic body and a nucleus that, somehow, exerts an influence over it; and there is that in the behaviour of the nerve-cell that strongly suggests the most distinctive characteristic of mind, that is, self-control. A normal cell when stimulated does not re-act to exhaustion, but responds by measure. Just as a person *chooses* to be more or less indifferent to one set of influences while responding freely to another, so also it seems to be with nerve-cells. This power of inhibition, as it is called, differs in cells and groups of cells as much as persons differ in temperament, and there is every indication that it is a phenomenon of exactly the same nature as that which convinces us that we are, to a certain extent, responsible beings.

And again, according to their special functions, the individual cells are organized in such manner that each group presents something the same aspect of unity in diversity that characterizes the larger organism. The individuals that have to do with the sense of hearing are organized in a system by themselves. Those that serve the sense of sight form another system; and those that serve the sense of touch, still another. So also those bodily functions that are less closely related to our consciousness: the beating of the heart, the movements of the lungs, and other complicated activities of the organism which we call *automatic*. And, somehow, there is a unity of action in each system, — a co-ordination, by means of which

* An Address on the "Specific Energies of the Nervous System," Dec., *1887*.

the activities of a diversified multitude are combined for the achievement of definite ends.

The substantiation of these facts stands out before us as the concrete, living endorsement of the two antithetical conceptions of God, which we have hitherto held against the protest of logical consistency. With the discovery of an adequate symbol for the major premise, the protest vanishes. Logic is with us. The indefeasible fact of an independent unity and multiplicity, existing in one being, takes these two aspects of God, that have been associated without union, and compacts them into one substance of unquestionable truth. We have in this fact a demonstration that may be likened to a chemical reaction when the particles of elements quite foreign to each other lock together in the formation of a new substance. We cannot at once realize how important a factor in the theology of the future this third series must be. It cannot but classify our fundamental conceptions of God, and rectify our thoughts of Him in many of life's relations. Let us glance at some of its more immediate effects.

Why, let us ask, is it that one side of our thought of God appeals to us as the practical, and the other as the mystical, somewhat unreal side? The belief that God works in and through man is a vital and fundamental part of our theology. Our knowledge of God that comes to us through the prophets, all that comes through the Incarnation, all that comes through conscience, grounds its claims upon the truth of this view. The doctrine of the Spirit that works with our spirit, that inspires, guides, and regenerates men, owns the same origin; and it is a part of our religion upon which we wish to take

a very strong hold, which ought to be exceedingly *real* to us. But does it not stand in the thought of most of us as a cloudy, unsubstantial, theoretical kind of belief? Is it not a view of things that impresses us deeply in hours of meditation, but which slips away when we come back to the things of earth? Are we not dogged by a sense of inconsistency and paradox in view of all our anxious forecastings of the future, our carefully laid plans, and our cautious exploration of our way through the world? And do not these strivings sometimes present themselves to us as a practical surrender of our religious beliefs?

If I mistake not, the doctrine of the Spirit is vague because it has always appealed to us as an abstract, unrestricted principle. The divine efficiency in its relation to human efficiency has nowhere been presented to us in the terms of a real symbol. It could not be so presented; because, until science had intervened, we knew nothing about the individuality and semi-independence of the subordinate units of an organism; and, unless we emphasize this, the full value of the analogy is not apparent. But, with this emphasis, the interaction and mutual limitation of divine and human efficiency find such a clear and concrete expression as to make it impossible for the one to overshadow the other in our thought. Magnify as we will the doctrine of the immanency of God, there is no tendency to the obscuration of man's personality. For our symbol so regulates and restricts the two truths as to make them not antithetical but complementary.

That form of enthusiasm which enjoins passivity on the part of man, in order that the Spirit may have

free course within him, finds no encouragement. It is the *activity* of the subordinate beings that furnishes the opportunity for the Supreme Being to work. It is when they are the most earnestly engaged, each one according to his special endowment, in working out their own salvation, that the higher power energizes most effectively within them. Neither, on the other hand, is it possible for us to lose sight of or underestimate the agency of the Spirit in our lives. For this, through the medium of our symbol, is represented by the over-ruling, determining, constantly modifying action of the *Ego*.

V

Let us pass in review some of the relations existing between the human Ego and its subordinate beings.

We may take it for granted that the primary interest of a nerve-cell centres in itself; that self-preservation and the discharge of natural activities command the lion's share of its attention. Its consciousness of other beings extends only to those of its own kind, or of nearly related kinds. Its interests are cell interests. At the same time, knowing what we do of the efficiency of the central Ego, we can hardly doubt that its determinations are represented in some way in the consciousness of cells affected by them. When the attention of the Ego concentrates itself upon a particular interest, the vitality and strength of the organism is directed to a special part of the brain or nervous system; and in that part there is superabundant life, activity, and growth. Somehow, we know not how, when this concentrated attention is accompanied by constructive effort on the part of

the Ego, its activity results in a more or less elaborate organization of nerve-cells corresponding to the form of thought in the Ego.

In what guise this organizing activity appears to the agents of it we shall never know. But we may reasonably conjecture that, *had they the power of reflection,* it would seem to them much as it now seems to us, when our plans and strivings appear to be tributary to larger ends than those which we have set before us; that they would have a vague consciousness of a sphere more important than that of the individual; and that in moments of creative activity they might conceive themselves to be inspired.

We might further illustrate this thought by referring to the well-known power of the Ego over the organism for the preservation of health and the overcoming of disease. When all goes well we say the organs of the body are doing their work normally and thoroughly; and we little think, perhaps, how much of this desirable state of things is to be credited to the confident cheerful attitude of the central consciousness. When disease comes, each organ and cell has its own way of contending against it; and if, when hard pressed in the conflict, there comes a great inflow of strength, it is perhaps that the Ego has heard good news, has found a new interest in life, or has thrown the whole force of a hitherto unused will-power into the battle.

In all these cases we have illustrated to us the greatest mystery of being, — the mystery of life within life, of mind co-operating with mind organically. We do not understand any better than before how such interaction is accomplished, nor how it is possible that a nerve-cell, while leading a life of its own, should at the same time be the unconscious agent of

a higher Being of whom it is a part. But it brings the *fact*, the reality, of a similar relationship on a different scale within the range of our ordinary experience. In one sense it remains a mystery; but in the same sense all the processes of nature are mysterious. It no longer has that most trying kind of mystery that inclines to doubt, — the kind that must always cling to a fact that stands alone, that can, in the wide universe find no other fact to which it can be likened.

There is another class of relations, not so direct but very intimate, that is capable of being turned to account in theology. The Ego is a *Providence*, both general and special, to its little world of subjects. It might seem, indeed, almost as true to say that they are a providence to it, for it owes its existence and development to their increase and organization; and its present state of existence would cease except for their constant activity in the performance of functions that only they know how to perform. But from the time that the Ego begins to be conscious of itself as an individual with wants to be satisfied and interests to protect, there begins also an activity of the one for the welfare of the many.

The first cry of the infant for attention is a demand of the one, in response to the inwardly manifested clamours of the multitude that have suddenly become dependent upon it. And from this time on, the destiny of the diverse beings that make up the cosmos of the human organism becomes more and more dependent upon the intelligence, the energy, and the morality of the Ego. When the Ego suffers hunger or thirst, what is it but that its myriad subjects are urging it with inarticulate prayers to consider and minister to their wants? Unless the Ego bestirs itself

they must starve. They, indeed, are able and willing to work for their living; but only when they are directed and led by the Ego can they work to any purpose. *It*, the Ego, must be the Divinity that shapes their ends, that combines and directs their skill and their energies in such a way that they shall accomplish the thing that is required. And when the constantly recurring wants of the multitude are regularly met by a bountiful supply of meat and drink, it must seem to them somewhat as the early and the latter rain and the timely sunshine seem to us.

Again, in view of hostile influences, the lives and the welfare of this great throng of beings are largely conditioned upon the wisdom of their sovereign Ego. They depend implicitly upon its sagacity, its vigilance, its courage, and its prudence to carry them safely through the innumerable dangers that beset their existence, — dangers which they can neither foresee nor guard against. They assist, according to their several endowments. One great division is organized as a corps of observation, another has been detailed and specially trained to gather information by the use of articulate speech, and this other constitutes the auditory system; but their activities are of no avail unless the Ego, or one of its trained representatives in a subordinate nerve-centre, elaborates the information received and gives effect to it through other sets of carefully educated, executive workers.

The higher we rise in the scale of being the more prominently does the non-mechanical aspect of this relationship appear, and the more clearly is the function of the Ego seen to be that of a far-seeing and overruling wisdom.

In the lower organisms, the quickness and uniformity of the responses to external influences, may suggest mechanism; but the more the Ego becomes developed the more critically does it consider the reports and petitions that are sent up by its subjects; and the more competent does it become to correct, to refuse, to modify, to reconstruct, and even to revolutionize. It becomes too wise to satisfy every appetite that importunes, according to the measure of its demands. The word discipline calls up to the memory of every moral man numberless occasions on which he has played the part of an inflexible ruler and governor. He has been hard pressed by the opposing claims of diverse interests in his little world; and he has found his wisdom sorely puzzled to adjust these, to give a reasonable satisfaction in many directions, so that there shall be no cause for desolating rebellions among his subjects.

Another side of the matter illustrated by our analogy is that of the *worth* of the subordinate individual. Cells, it is true, are continually perishing and their places are taken by others. They succeed each other as the generations of men succeed each other in the social organism. But, while it lives, every living cell has functions to perform, the significance of which cannot be isolated from the significance of the whole. The faithful performance of its part contributes something to the vitality of other members of the organism and, at the same time to the happiness and efficiency of the Ego. In this dual relationship, we have a unique symbol for illustrating the meaning of the dual statement of the great law of religion and morality: "Thou shalt love the Lord thy God with all thy heart, and thy neighbour as thyself."

Duty to one's neighbour is not something separate from, and superadded to, duty to one's God. It is, in the organic unity of the world, only a different aspect of the same duty. Devotion to the Supreme Being can realize itself in only one way, — faithfulness to organic relations. The immediate concern of each individual element, or being, is the discharge of its special functions as related to other beings. But this is made sublime and inspiring for man by the knowledge of his connection with the Supreme Ego.

It has probably occurred to the reader that, in the development of the analogy derived from the physical organism, we have also availed ourselves of the closely related one of the social organism; and it may seem that there is something forced and artificial in striving to combine, in our thought of the Supreme Being and His human subjects, ideas acquired in departments of experience so separate. It may therefore be worth while to add to what has been said of the similarity and continuity of these departments, the consideration that they are in all respects *homogeneous*. They differ not in kind, only in degree. Every important characteristic of the one is represented to some extent in the other. In the social organism, as well as in the physical, the relations which we study are relations between organized groups of nerve-cells.

The characteristic that specially distinguishes the relations of the social organism is that of externality. When one individual has relations with another he seems to be dealing with that which is no part of himself, but a separate entity, a separate focus of interests. A natural chasm has to be bridged by some means of communication. Contrasted with this, action within the physical organism seems to be direct,

instantaneous, and accomplished without the intervention of means.

But if we penetrate beneath this outside appearance of things, we shall see that in both cases there is another phase of the reality than that which has preoccupied the imagination; and that when this is taken into account, the two sets of relations declare themselves to be not *essentially* different, but only different in the degree of prominence developed in certain elements. We shall be convinced that our thought of ourselves, as contained within the little world of a physical organism, is a false suggestion of the imagination. Our existence extends as far as our communications extend. The head of the body politic, the ideal king or statesman, whose sight reaches to every quarter of a great realm, and whose comprehensive intelligence understands all the varied interests that balance each other within it, is a vast being compared with the day-labourer who has no thought above the routine of his occupation, though he may, perchance, have a larger body and a heavier brain.

The difference consists in this: that the statesman has brought into vital connection with his own brain the brains of a multitude of diverse individuals. If we allow our thoughts to be captured at this point by a contemplation of the means by which all this is brought about, we shall assuredly rest in that which is secondary and incidental, and lose sight of the essential fact. The man of high position in the state has, it is true, extended the field of his consciousness and power by means of such things as articulate sounds, printed books, letters hurried by steam from one end of the realm to the other, and by the use of electric

wires stretched to every town and hamlet like the nerve-fibres of the body.

But we must look underneath all this machinery to find the essential conditions of its effectiveness: namely, the fact that the brain masses belonging to all these individuals of the nation are homogeneous, and, therefore, capable of being linked together so as to pour all their knowledge into the combining consciousness of any individual whose capacity is equal to its reception. From this point of view, therefore, the externality of the relations between individuals has to give place to another phase of the truth that is equally real and more vital.

And furthermore, when we examine the phenomena that characterize the interaction of the elements within the physical organism, the impression of immediateness and absence of means vanishes. There is no internal communication that does not require time for its transmission; and all the intercourse that takes place between individual elements within the organism is as dependent upon means as that which takes place outside of it. Much attention has, of late years, been given to the accurate measurement of the intervals that elapse between the reception of stimuli by different exterior organs and their perception at headquarters. In short, scientific research tends continually to the abolition of those special marks by which we have discriminated between the intercourse of beings within and without the organism.

We may then cherish a dual thought of God without contradiction. We may think of Him as our Sovereign. We may picture to ourselves this vast universe as a network of means for conveying the knowledge of itself to the Being who dwells apart, separate

in His individuality, yet so connected with each one of His creatures that nothing is indifferent to Him. On the other hand, when we think of *our* relations to the great sum of things, so connected in every part as to form an organic unity, and of the one life and order that flows through all, we have to put the thought of separateness far into the background, concentrating our attention on the one organic Being.

Each of these views in its own place is best. No greater mistake can be made than to array them against each other. God dwells within His world, the very life and breath of all things. He is the great heart and brain of the universe. He is the Ego, for Whom and by Whom all things exist. Every plant and flower and every animated form is an expression of some thought of His. Every event that takes place in His world is an incident in His life.

But, on the other hand, God is also transcendent. He is the Supreme Being of a vast hierarchy of beings. He is distinct from all the others, and above them all. They are His ministers that do His pleasure. He is their Sovereign, they are His subjects. He is their Father, they are His children. He is their Creator, they are His instruments. He directs and overrules their activities for the attainment of ends that dwell in His thought as ideals.

APPENDIX B

Henri Bergson

WHEN a scheme of thought comes into the world that compels the attention and admiration of many thinkers of divergent ways of looking at things, it is a phenomenon worthy of our study. This is the significant fact with regard to the philosophy of Professor Henri Bergson.* He is attracting to himself men of the most widely different outlooks, temperaments, and doctrines, each one of whom finds in him the endorsement of something that is peculiarly dear to him. Seeing that his method is from first to last thoroughly pragmatic, that he goes direct to nature for his facts and gives the impression of great single-mindedness in his interpretation of them, it is no wonder that he is received with enthusiasm and acclaim by those who class themselves as pragmatists. But, on the other hand, those of the opposite camp, the absolutists of various shades, would lock arms and claim him as their own.†

* No citations of Bergson have been made in the foregoing pages, for the simple reason that the author had not read any of the works of that distinguished writer till after his own book (with the exception of Chapter I and the Appendices) was completed.

† See Review by J. H. Muirhead, *Hibbert Journal*, April, *1911*, p. *895*.

We can hardly explain this condition of things by qualities of attractiveness in style and form, though Bergson has these qualities in a remarkable degree. In the words of Professor James, "The rarity is when great peculiarity of vision is allied with great lucidity and unusual command of all the classic expository apparatus. Bergson's resources in the way of erudition are remarkable, and in the way of expression they are simply phenomenal. This is why in France, where *l'art de bien dire* counts for so much and is so sure of appreciation, he has immediately taken so eminent a place in public esteem." *

The very possession of these qualities, again, forbids us to attribute the consensus of approval to vagueness or indeterminateness in the presentation of his views. He asks us, it is true, to follow him sometimes into nebulous reaches of thought where intellectual breathing is difficult. James avers that many of his ideas baffle him entirely. But it is not in these alone, but also in the open fields of constructive philosophizing that the stamp of approval is set and the claim of fellowship made. We must, then, go deeper down to find the secret; and I believe it to be condensed in that well-worn formula: "One touch of nature makes the world akin." A distinctive thing about Bergson is that he brings his great store of resources and gifts to bear without hindrance from disabling prepossessions. He is thoroughly emancipated from the spell which Darwinism and the mechanical view of the universe have exercised over so many minds, some of them of a high order.

He goes to nature open-eyed, not labouring under the

* "A Pluralistic Universe," p. *226*.

necessity of making what he finds there tally with the theory of "Natural Selection" or with that of the creation of new forms by the very unoriginating principle of heredity. On the contrary, his philosophy is a frank return to seeing the world as the unscientific see it. It restores the psychological, spiritual aspect of it, which the speculative science of the last century did so much to banish. It removes the opacity and dullness that prevailed under this regime, and permits us to think the world with the fresh thoughts of children. There is a buoyancy and a tonic in this philosophy that is specially acceptable in an age of pessimistic exhalations. It restores vitality to that which was becoming anemic, hope and expectancy to a world whose outlooks seemed to be fast closing up.

Bergson does not enter the domain of theology, or postulate, as we do, an all-pervading intelligence at the heart of things, but he points persistently in this direction and, by his implications, pushes us toward some such hypothesis. His attitude toward a solely mechanical interpretation of the universe is explicit. This is, he tells us, the outcome of a habit into which the intellect has been betrayed by the instrumental use of material things. It, the intellect, unconsciously forms for itself a framework of knowledge into which all its experiences fit, except those which touch life. It is "at home in the presence of unorganized matter. This matter it makes use of more and more by mechanical inventions; and mechanical inventions become the easier to it the more it thinks matter as mechanism. The intellect bears within itself, in the form of natural logic, a latent geometrism that is set free in the measure and proportion that the

intellect penetrates into the inner nature of inert matter." *

So long, therefore, as it deals only with the inanimate, all the facts fit into the frame-work perfectly. But immediately it claims universality for this mould of thought, it gets into difficulties; for life is incapable of being forced into it otherwise than by a convention which eliminates from it all that is essential. To correct this aberration, he begins by tracing a definitive line between the inert and the living, which leaves us free to adopt a special attitude toward the latter and to examine it with other eyes than those of positive science. Life or creative force is, he holds, the antithesis of mechanism and matter; and the facts of evolution, far from necessitating or inviting a mechanical interpretation, are the contradiction of it. He asks, "Can the insufficiency of mechanism be proved by facts?" and answers, "If this demonstration is possible, it is on condition of frankly accepting the evolutionist hypothesis." †

The dualism, thus postulated at the outset of the discussion, persists through the whole course of the argument. In the universe, to use his own words, "two opposite movements are to be distinguished, *descent* and *ascent*. The first only unwinds a roll already prepared. In principle it might be accomplished almost instantaneously, like releasing a spring. But the ascending movement, which corresponds to an inner working of ripening or creating, endures essentially and imposes its rhythm on the first, which is inseparable from it." ‡

* "Creative Evolution," by Henri Bergson, Member of the Institute, Professor at the College de France. Translated by Arthur Mitchell, Ph.D., p. *195*.

† *Ibid.*, p. *53*. ‡ *Ibid.*, p. *11*.

These movements, which correspond to the two most general laws of our science, the principle of the degradation of energy and that of its conservation, are antagonistic to each other. On the one hand, we see the world running down, unmaking itself, descending all the time into stereotyped, material forms; and, on the other, a counter movement of ascent through a creative impulse which, great as it is, has yet a tendency to exhaust itself. "All our analogies show us in life an effort to remount the incline that matter descends; in that they reveal to us the possibility, the necessity even, of a process, the inverse of materiality, creative of matter by its interruption alone."* This fundamental discrimination sends a clarifying current through the vexed questions that confront us everywhere in connection with life's varied antagonisms. The struggle for existence, the conflict between its varied forms, the retrograde movement that sets in immediately upon the cessation of effort, the phenomena of old age and decay, the difficulty and labour involved in the improvement of human conditions, the painfully slow increase of intelligence, the decay of instinct, and the late emergence of moral discriminations — all these and a multitude of similar situations find in this dual movement a satisfactory classification.

They are not, thereby, teleologically explained, but they are securely lodged in the first indispensable stage of explanation. By referring them to the two great tendencies of nature above mentioned, these facts are ranged as necessary and homogeneous parts of the great universal scheme of things in which we find ourselves. The "tremendous internal push" that is the

* *Ibid.*, p. *245*.

cause of vital evolution is, according to Bergson, the outcome of a need of creation. "It cannot create absolutely because it is confronted with matter, that is to say, with the movement that is the inverse of its own. But it *seizes* upon matter, which is necessity itself and strives to introduce into it the largest possible amount of indetermination and liberty."* But, as it is a limited force seeking to transcend itself, it always remains inadequate to its work. From the bottom to the top of the organized world we observe one great effort, but everywhere there is manifest a disproportion between it and the result.

As to the use of the word *impetus* for the designation of the life principle, Bergson recognizes its insufficiency and its misleading implications. He says, "It must be compared to an *impetus* because no image borrowed from the physical world can give more nearly the idea of it. But it is only an image. In reality life is of the psychological order."† It is only in its contact with matter that it is comparable to an impulsion or an impetus, "regarded in itself, it is an immensity of potentiality."

Throughout the discussion, this view of the nature of the vital principle is honoured. The concept *impetus* is largely replaced by that of effort and always with the suggestion of conscious, intelligent effort. "It is the rôle of life," he tells us, "to *insert* some indetermination into matter." To this end it "*seizes* upon matter." Its "main energy has been spent in *creating* apparatus." It "is always seeking to transcend itself." It "*hesitates*." "It finds only one way of succeeding." In short, it is only through the use of terms implying intelligence and will that he makes

* *Ibid.*, p. *251*. † *Ibid.*, p. *257*.

the process intelligible to us. Every relapse to the mechanical thought acts as a shutter to the understanding.

Again, the necessity for postulating an indwelling intelligence is, it seems to me, latent in Bergson's account of instinct and intelligence. These two, he holds, are not things of the same order. They are at once mutually complementary and mutually antagonistic. The following paragraph is italicized by our author: "The cardinal error which, from Aristotle onward, has vitiated most of the philosophies of nature is to see in vegetative, instinctive, and rational life, three successive degrees of the development of one and the same tendency, whereas they are three divergent directions of an activity that has split up as it grew." * Accepting this, what shall we say is the nature of the original "activity"? and what has caused it to split up into two kinds, antagonistic and complementary to each other? In the beginning they were one psychic activity, and because they were originally interpenetrating they retain always something of their common origin. "There is no intelligence in which some traces of instinct are not to be discovered, more especially no instinct that is not surrounded by a fringe of intelligence." † This accounts for the fact that they have been generally regarded as of the same kind, while "in reality they accompany each other only because they are complementary."

The point, I take it, is that they are the same from one point of view, that of their essential nature; but distinctly different from another point of view, that of their functioning. They both, we are told, involve knowledge—"in the case of instinct, unconscious, in

* P. *135*. † *Ibid.*, p. *136*.

the case of intelligence, conscious."* Though so different, however, they are both innate. Instinct is the knowledge of things, concrete situations; intelligence is the knowledge of relations. "If instinct is, above all, the faculty of using an organized natural instrument, it must involve innate knowledge (potential, or unconscious, it is true), both of this instrument and of the object to which it is applied. Instinct is, therefore, innate knowledge of a *thing*. But intelligence is the faculty of constructing unorganized (that is to say artificial), instruments. . . . The essential function of intelligence is, therefore, to see the way out of a difficulty in any circumstances whatever, to find what is most suitable, what answers best the question asked."†

An intelligent being, therefore, bears within himself the means to transcend his own nature; not, however, in virtue of his intelligence, but because this is supplemented by instinct. "There are things that intelligence alone is able to seek, but which, by itself, it will never find. These things instinct alone could find; but it will never seek them."‡ I think it will be generally conceded that this account describes truthfully the salient characteristics of instinct and intelligence, and that the claim that they are, *as related to the activities of the individual*, different in kind, is well grounded in experience.

As we look on this side and on that, each antithetical statement commends itself as true; but we get no intelligible idea of how they are combined in operation, or how their difference has originated; nor can we, unless we should find, somewhere among our concrete experiences, a combination of diverse and yet similar

* *Ibid.*, p. *145*. † *Ibid.*, p. *150*. ‡ *Ibid.*, p. *151*.

influences functioning in somewhat the same way, and thus reach a serviceable understanding of their relations. Such a concrete experience is, it seems to me, afforded us in the duality of the motives by which our daily lives are regulated. We may divide these motives into two distinct classes: first, those which have been self-elaborated, gradually reached through reason and experience; and, second, those which have had their rise quite independently of any intellectual processes of ours.

In other words, everything adduced by Professor Bergson to explain the difference between intelligence and instinct applies perfectly to the difference between the knowledge which a man works out for himself and that which has been worked out for him by some other man. Intelligence, then, is one's own intelligence. Instinct is the intelligence of another, appearing in experience as an impulsion to perform certain definite acts, the reasons for which are known only to a more comprehensive wisdom. Thus we are again urged in the direction of the hypothesis of a higher intelligence with which we are intimately and organically connected.

As regards teleology, Bergson holds a middle course. After demonstrating the insufficiency of the mechanical explanation, he turns to the consideration of purpose or finalism; and his first word with regard to it is that "radical finalism" is quite as unacceptable as radical mechanism, and for the same reason. "The doctrine of teleology in its extreme form, as we find it in Leibniz, for example, implies that things and beings merely realize a programme previously arranged. There is nothing unforeseen, no invention or creation in the universe. As in the mechanical hypothesis, here again it is supposed that *all is given*. Finalism, thus under-

stood, is only inverted mechanism."* But, on the other hand, "finalism is not, like mechanism, a doctrine with fixed, rigid outlines. It admits of as many inflexions as we like. The mechanistic philosophy is to be taken, or left: it must be left if the least grain of dust, by straying from the path foreseen by mechanics, should show the slightest trace of spontaneity. The doctrine of final causes, on the contrary, will never be definitely refuted. If one form of it be put aside, it will take another. Its principle, which is essentially psychological, is very flexible. It is so extensible, and thereby so comprehensive, that one accepts something of it as soon as one rejects pure mechanism. The theory we shall put forward in this book will therefore necessarily partake of finalism to a certain extent."†

As matter of fact, Bergson makes a very generous use of teleology; for while he most carefully abstains from postulating any definiteness of plan in nature, and duly emphasizes the fact that the study of the process, in detail, is continually leading us into the wilderness he calls attention to the fact that there are two or three highways, and that by following these as closely as possible we shall be sure of not going astray; and furthermore, that what concerns us particularly is the road that leads to man. Man is unique. He alone has broken through the barrier that holds the rest of creation in abeyance. In a special sense, man is the term and the end of evolution. Not that he is the sole end, or the end in any such sense that it can be said that all the rest of nature is for the sake of man. He has struggled like the other species, he has struggled *against* other species. "Evolution has been accomplished on several divergent lines; and while the

* *Ibid.*, p. *34*. † *Ibid.*, p. *40*.

human species is at the end of one of them, other lines have been followed with other species at their end." *

In his struggle upward, man has suffered losses. He has not only abandoned cumbersome baggage on the way; he has also had to give up valuable goods. As regards some kinds of instinct, he is manifestly inferior to animals lower in the scale. "It is as if a vague and formless being, whom we may call, as we will, man or superman, had sought to realize himself and had succeeded only by abandoning a part of himself on the way. The losses are represented by the rest of the animal world and even by the vegetable world. . . . From this point of view the discordances, of which nature offers us the spectacle, are singularly weakened. The organized world, as a whole, becomes as the soil on which was to grow either man himself or a being who morally must resemble him. The animals, however distant they may be from our species, however hostile to it, have none the less been useful travelling companions, on whom consciousness has unloaded whatever encumbrances it was dragging along, and who have enabled it to rise, in man, to heights from which it sees an unlimited horizon open before it." †

Bergson, furthermore, gives side glances at certain pregnant outcomes of evolution that, focalized, are capable of conducting us to a much more definite teleology than that for which he makes himself responsible. There are certain results of the process which, in the body of this book, we have called its indirect increment, its by-products. They are, as related to man's purposes and efforts, unexpected side issues; but, as

* *Ibid.*, p. *266.* † *Ibid.*, p. *266.*

related to the highest results of evolution, they are the matters that, above all others, have significance and persistent value. Bergson, now and again, while emphasizing the fact that intelligently-made mechanism has contributed to, and greatly modified, human evolution, recognizes, as it were with bated breath, the importance of these indirect, unintended promoters of it.

"A noteworthy fact is the extraordinary disproportion between the consequences of an invention and the invention itself. We have said that invention is modelled on matter and that it aims, in the first place, at fabrication. But does it fabricate in order to fabricate, or does it not pursue involuntarily, and even unconsciously, something entirely different? Fabricating consists in shaping matter, in making it supple and in bending it, in converting it into an instrument in order to become master of it. It is this *mastery* that profits humanity much more even than the material result of the invention itself. Though we desire an immediate advantage from the thing made, as an intelligent animal might do, and though this advantage be all the inventor sought, it is a slight matter compared with the new ideas and new feelings that the new invention may give rise to in every direction, as if the *essential* part of the effect was to raise us above ourselves and enlarge our horizon. Between the effect and the cause the disproportion is so great that it is difficult to regard the cause as *producer* of its effect."*

If the principle here illustrated manifested itself in no other way than in that above noticed, we could put it aside with an interrogation; it is, we might say, an experience awaiting more light for explanation. But,

* *Ibid.*, p. *182.*

far from being isolated, its manifestation is as broad as life and as varied as human endeavour. And the mystery of it, without the hypothesis of a divinity that shapes our ends, is equally great in every class of our experiences.

All our real growth, our actual progress in the scale of being, is in the beginning achieved by this same method of indirection; and though it is only at an advanced stage that we learn to pursue life's higher ends consciously and directly, yet when this stage is reached and we recognize character as the supreme value toward which evolution moves, then it is that we are in a position to construct a working teleology, looking before and after. Such an interpretation of life's meaning will still lack definiteness. It cannot be outlined with mathematical precision. It must be always growing with our growing ideals; but the direction of it, and the nature of the Supreme Reality that is at once its Source and its End, becomes increasingly known to us. Bergson, in another connection, recognizes the possibility of thus penetrating to the inwardness, the "intention," of life by the use of the activity which he calls *intuition*. "It is to the very inwardness of life that intuition leads us — by intuition I mean instinct that has become disinterested, self-conscious, capable of reflecting upon its object and enlarging it indefinitely." *

If I am not mistaken, this describes, in different language, the very process above outlined. In all our strivings to better ourselves, whether by creation or by acquisition, the immediate object of our ambition is something clearly and definitely apprehended by intelligence. But the underlying motive that urges us

* *Ibid.*, p. *176*.

on, is instinctive — the instinct that craves self-realization in some form. And some degree of self-realization is, as we have seen, the only result of the striving that is of persistent value. It is only when, subsequently, this value is forced upon our attention, that we begin to understand the true meaning and intention of life.

The importance of such a contribution as this of Professor Bergson to the modern science of theology cannot be indicated in a slight sketch like the present one. It needs careful study and quiet thought. It is a deep well of wisdom, though it assumes to be only the beginning of a philosophy.

Its reserves enhance its value; for they produce upon us the impression that the work moves, primarily, and without prejudice, in the interests of science and philosophy. As related to theology it is the supplier of materials ready shaped for building, and of instruments well tempered for use. Or, we might say, it is a competent guide through the territory of science and philosophy up to the borders of theology, where we find paths continuous with those which we have travelled in the author's company. I say paths, for there are many, taking their departure from diverse points and converging to one common centre.

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